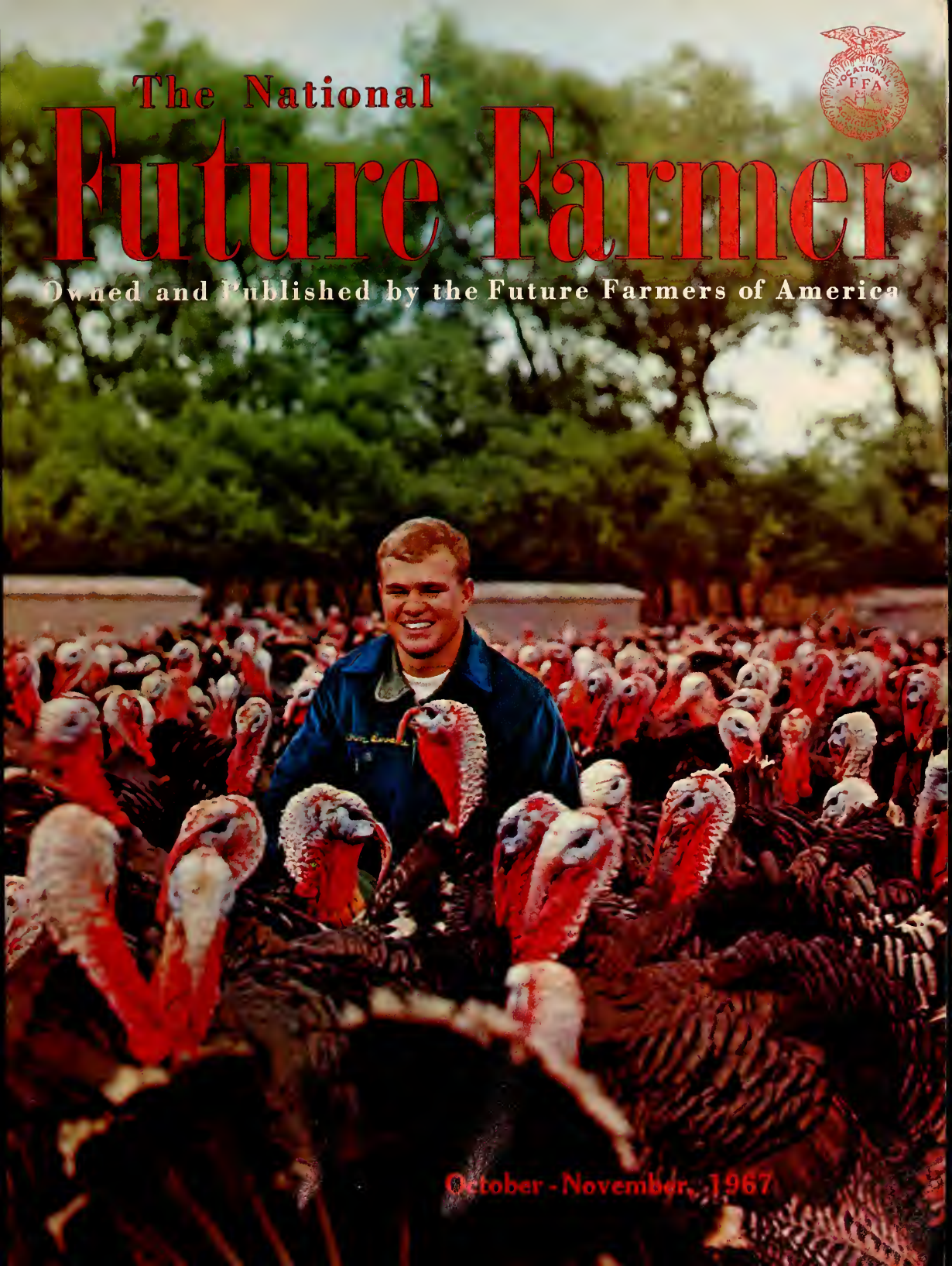
The National Future Farmer

Owned and Published by the Future Farmers of America



October - November, 1967

The door is open for future farmers in the Union Pacific West

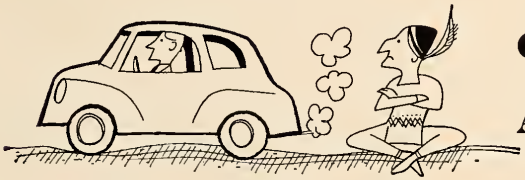
UNION PACIFIC RAILROAD

9 out of 10 drivers can't answer all these questions. Can you?

A good driver is one who never gets himself into an emergency situation yet who knows how to handle one just the same. Firestone, a pioneer in highway safety, poses some tricky questions that can help you tell whether you know the finer points of car handling.

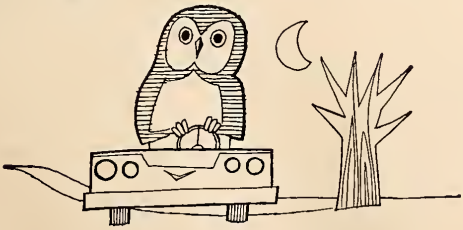
Q Good drivers try to anticipate the action of the car ahead. When you see lazy puffs of smoke coming from the exhaust, what's he going to do?

A The driver has taken his foot off the accelerator. He may be getting ready to turn or stop. Stay behind until his intentions are clear.



Q Is it more dangerous to drive with tires that are under-inflated or over-inflated? Can you justify your answer?

A Under-inflated tires will result in a blowout more often than over-inflated ones. The reason is that the added flexing of the tire causes more heat build up. Your Firestone man can answer your tire questions. Follow his recommendations for tire pressure.



Q You probably had been driving a few months before your parents let you drive at night. Do you know how much greater the chances are that an accident after dark will result in a fatality?

A Night accidents result in fatalities twice as often as daytime accidents. Make doubly sure that you, your car and your mental state are in driving condition.

Q The skill of the driver and the condition of his equipment are two important considerations in making a safe driver. What's a third, and (to many authorities), the most important factor?

A Your mental state is probably the most important factor in driving safely. The smart thing to do is let somebody else drive when you're angry or worried.

Q This is a rare one, but it happens. You're driving along a slippery road when you skid into the lake. What now?

A Don't panic! You won't sink immediately. Wait until the car rights itself — it will. Then open a window and crawl out. Water pressure won't let you open the door until the car has filled.

Q How much faster do you wear out tires at 70 mph than at 35? Why?

A About 65% faster. For maximum tire mileage, stay between 40 and 55. The faster you go, the more you distort your tires and set up irregular heat patterns. Firestone makes different tires to meet different driving needs.

Q You're doing 65 on the turnpike and you want to pass a car going 60. How much road do you need to pass safely?

A You'll need 4,000 feet of clear road. At 70, you ought to be 140 feet behind when you start to pass and you shouldn't pull in until you're 140 feet ahead. That will take 40 seconds. Figure it out.

Q What tire is first choice for original equipment on new cars?

A Firestone — with good reason.

YOUR SAFETY IS OUR BUSINESS

Firestone

A Sponsor of National Student Traffic Safety Program, National 4-H Automotive Program and FFA

The National
Future Farmer
Owned and Published by the Future Farmers of America

OCTOBER-NOVEMBER, 1967

THE MAGAZINE FOR YOUNG MEN IN AGRICULTURE

VOLUME 16 NUMBER 1

In This Issue

FEATURES

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AMERICA

26 Star Farmers of America

FROM AMONG FFA MEMBERS APPROVED TO RECEIVE FFA'S HIGHEST HONOR, THE AMERICAN FARMER DEGREE, FOUR STAND OUT. THEY ARE THE NEW STAR FARMERS OF AMERICA. ONE WILL BE NAMED 1967 STAR FARMER OF AMERICA AND TAKE HIS PLACE IN FRONT OF THAT STAR AT LEFT. READ THIS STORY AND PICK THE WINNER.

40 Blueprint For The Future

IF YOU HAVE BOOMED ACROSS THE ENTRY BARRIER INTO A FARM PARTNERSHIP WITH YOUR DAD, THERE'S STILL A CHANCE YOU MAY RUN INTO LEGAL ENTANGLEMENTS . . . A YOUNG FARMER'S GRAVEYARDI A PROFESSIONAL GIVES ADVICE ON HOW TO PLAN A "BLUEPRINT FOR THE FUTURE" AND THUS AVOID POSSIBLE PARTNERSHIP LEGAL PROBLEMS.

56 A New Look At Judging

IF A JUDGING TEAM WERE TO BASE THEIR DECISION ON FIVE-YEAR-OLD STANDARDS, THEY WOULD NOT FARE VERY WELL IN TODAY'S CONTEST. THE PROBLEM: HOW DO YOU MAKE A DECISION BASED ON CARCASS TRAITS AND NOT OVERLOOK TYPE TRAITS? IN THIS ARTICLE, YOU SEE FOR THE FIRST TIME BEEF CUTS AS THEY ACTUALLY APPEAR BENEATH THE HIDE OF THE BEEF ANIMALS.

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Our Cover

We'll wager that the first things you thought of when you saw this issue's cover was Thanksgiving dinner.

That is, unless you have a turkey production enterprise like Warren Bevans, Waverly, Nebraska, who is the lad kneeling in the midst of those birds.

He's thinking or hoping for a profit.

PHOTO BY ROY W. EQUALL

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March 20 . . . . . APRIL-MAY Issue
May 20 . . . . . JUNE-JULY Issue
July 20 . . . . . AUGUST-SEPTEMBER Issue
September 20 . . OCTOBER-NOVEMBER Issue
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His 29 years in agriculture all started where FFA began...

Tom Cox took his first giant step toward a career in agriculture back in 1933. That's the year he earned his B.S. in agricultural education at Virginia Polytechnic Institute—the school where the idea for FFA was originally formulated by Henry C. Groseclose.

Tom did not return to the farm to stay, but he decided to remain close to farm people in whatever he did. For the next 3 years, he taught agriculture in Bath County, and managed FFA chapter activities.

Seeking specialization, Tom earned his M.S. in soil chemistry from Michigan State University in 1938, and then served as a research agronomist at the Rhode Island Experiment Station.

Tom joined our Cyanamid staff as a field agriculturist in 1946. Since then, he has traveled hundreds of thousands of miles, helping farmers to get maximum crop yields for their fertilizer dollars. Tom has earned a reputation for his knowledge and counsel on problems in fertility and crop management. Today, as Cyanamid's manager of plant nutrient development, Tom still travels to work with Cyanamid's expanded field force of agronomists and farm service centers.

Men such as Tom Cox—raised on farms and educated in agriculture—have been the key to our sixty years of service to farming. Their abilities help Cyanamid develop and produce reliable products to increase farm productivity and profits: products such as Aureomycin®—Aureo S·P® 250—Malathion—Cygon*—Thimet®—Sulmet®—Cyprex® and many others including phosphate and nitrogen products.

If you would like to know more about Cyanamid in agriculture, send a postcard or letter to Tom Cox, c/o Cyanamid, Princeton, N. J. He will be happy to hear from you and to send a reply.

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In 4-wheel drive, the 4100 has the pull of a crawler. But with 4-wheel steer, it handles like a car. Even better, for it turns in a 13½-foot radius.

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First to serve the farmer

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Looking Ahead

Livestock

FED CATTLE MARKETINGS CONTINUE LARGE—Fed cattle marketings during July were 10 percent above last July's. They are expected to continue above year-earlier levels, but the margin is expected to narrow. Choice steers sold at Chicago for about $26.75 per hundredweight in mid-August—about 50 cents above a month earlier and $1.00 above a year earlier. Fed cattle prices are expected to continue strong and may show moderate strength as the margin of marketings over a year earlier diminishes.

A BILLION SHEEP—There are 1,000 million sheep in the world. Latest estimates put total numbers at 1,027 million head, up 1.3 percent from last year. In the five major Southern Hemisphere producing and exporting countries (Australia, New Zealand, Argentina, Uruguay, and South Africa) there are 334 million, 2 percent more than last year.

ELIMINATE MACHINE STRIPPING—The elimination of machine stripping of dairy cattle has little effect on milk production or percentage of fat. Neither does it cause mastitis, according to a Cornell University scientist. In his report before the American Dairy Science Association, he said no differences were found in leucocyte counts or California mastitis test (CMT) scores. "These results tend to show that the importance of machine stripping has been overemphasized," he said.

BROILER GROWERS NEED PROTECTION—In a sharply worded statement, Secretary of Agriculture Orville Freeman has said his department will undertake a program to protect broiler growers under the Federal Packers and Stockyards Act. He said his auditors have found cases where returns to growers of identical efficiency in the same area varied as widely as 50 percent between firms. Yet growers could not bring returns into line by shifting from low-pay to high-pay firms because they couldn't get information to compare contracts. Nearly all broilers are now produced under contract to integrated firms.

PREDICT QUALITY OF COW'S OFFSPRING—Dairymen in the future may be able to predict the superior and inferior qualities which a cow is capable of transmitting to her offspring. Here's how the Iowa State University plan might work: Records of paternal and maternal sisters, daughters, and the dam of a cow would be analyzed, with the positive or negative contributions of each helping to determine the "estimated average transmitting ability (EATA) value of each cow.

Crops

WATER FOR GRAZING AREAS—Many grazing areas receive enough precipitation to produce considerable forage. The problem has been to provide drinking water so livestock can utilize this forage. Now the rubber industry has found an answer. Rainfall is literally trapped on land covered by a rubberized fabric, and it drains into large collapsible bags. These giant bags and ground covers will make it economically possible for farmers to utilize rangeland that otherwise could not be grazed.

SLEEPING APPLES—A machine designed for keeping deadly gases out of nuclear submarines is being used to preserve the eating flavor of apples for up to one year. The principle involves retarding the respiration of apples, which causes them to deteriorate. Developers hope to apply the principle to preserving other commodities.

NEW WINTER PASTURE—For years, farmers have needed a crop that could provide, from October through December, sufficient bonus growth of pasture to meet critical winter pasture needs. A partial-hybrid rye, Vita Graze, may help solve this problem. It is reported to produce a bonus of 18.02 percent more forage monthly than other varieties of rye. It averages 33 percent more digestible protein than rye grass or oat pasture. It is available in limited quantities for the first time this season.

CROP BINS REPLENISHED—Acreage for harvest this year is the largest since 1960 and 7 percent above last year. A record corn crop (4.7 billion bushel estimate) could leave as much as 860 to 900 million bushels on hand (carryover) at the end of the crop year.

Machinery

REVERSIBLE TRACTOR—Iowa State University engineers have come up with a "versa-tractor" which is made more useful by placing controls and operator's platform on a swivel so the operator faces the direction of travel. The tractor has eight forward speeds and four speeds in reverse. Operated in forward position, the tractor can pull tillage machines such as plows, disks, and cultivators. In reverse, a number of machines such as loaders, windrower, combine, and corn harvester are compatible with the tractor.

NEW MILK TESTER—New York dairy scientists are testing a Denmark-made Milko-Tester which may reduce the cost of milk analysis for butterfat. It is also much faster than the traditional Babcock method. The machine homogenizes a milk sample and dilutes it. The device then passes a light beam through the sample and estimates the amount of fat from the size of the shadow cast by the fat droplets. Percentage can be read directly from a meter.

HYDRAULIC TRACTOR SEAT—A new type hydraulic tractor seat has been developed by an Israeli company and will be marketed worldwide. The new seat introduces a system of balanced ratio between built-in hydraulic shock absorber and coil springs. Unlike the usual type of seat suspension introduced in recent years, the new Israeli design maintains uniform spring tension. It is built for replacement on practically any tractor now in use as well as new models.

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These give you a better-balanced ration, one that keeps animals healthy, on-feed, and growing. Gains are economical, too, because assimilation improves.

Your stock puts on solid, meaty gains and grade out higher. Bloom improves, and they show better. Milk and egg production go up, too, on Milk-Bank rations.

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A Word with the Editor

Fifty Years of Vocational Agriculture

The National FFA Convention this year will focus attention on 50 years of vocational agriculture in a colorful pageant entitled "Fifty Golden Years," and it has truly been 50 golden years.

Vocational agriculture, as we know it today, had its origin in the Smith-Hughes Act of 1917. This act was sponsored by Senator Hoke Smith and Representative Dudley Hughes, both of Georgia. While later acts ammended the original legislation, the basic concepts remain unchanged.

It would be impossible to measure the impact vocational agriculture has had upon American agriculture, but certainly it has made a major contribution in providing this country with the most bountiful food supply the world has ever known.

The challenge for the future has been stated by Mr. H. N. Hunsicker, national FFA advisor, who said, "Agriculture today is the strength of the nation, but modern agriculture requires modern training, both for farming and for those occupations related to farming which require knowledge and skill in agricultural subjects. Good careers await young people with agricultural training. The fate of the world may depend upon their proficiency."

A National Home For FFA

The article on pages 24 and 25 entitled "A National Home For FFA" is one you will want to read carefully. It discusses an idea which can be realized if Future Farmers want to achieve it. After you have read the article and discussed it with other FFA members, let us know what you think. Would you like to have a part in building this Center for FFA?

Thanks to FFA Foundation Donors

Dr. Reed

While speaking to FFA Foundation donors at their annual meeting, Dr. Wayne Reed, associate commissioner in the U.S. Office of Education, made the following comments. We thought you would enjoy reading what Dr. Reed had to say.

"I find profound meaning—and much encouragement—in the fact that a group of men and women like yourselves—busy people, leaders in the professions, in labor, and in industry—are taking the time to concern yourselves about . . . the Future Farmers of America. You are part, you are makers, of our impressive industrial and urban civilization; yet by your active relationship to our 'children of the soil' you express your deep concern that this civilization of ours should not threaten the fundamental, wholesome ideals and points of view we have always associated with nature.

"Your concern is no accident. And it is not superficial. In most of you, it has doubtless grown out of your own early roots in nature. I myself was once a farm boy, and I know some of the gifts that nature can bestow: hope out of the springtime; courage out of the storm, and acceptance of what it brings; and thrift out of the harvest. What you have learned from fields and animals, from woods and birds, from leaves and roots, and streams—all this is part of you now. And it explains, in large part, your respect for the soil, those who till it, and those who cherish it.

"Here in Washington, more than in any other city of the nation, there comes to a focus the growing public concern over man's wanton destruction of the earth's resources. About this, none of us can care too much. But we can all take hope in the fact that thousands of this nation's boys and girls have banded together in dedication to a wise use of nature; and that they have, standing steady behind them, rank on rank of cultured and compassionate men and women.

"I congratulate and thank you for your generosity in providing the incentive that money can give. But even more I congratulate and thank you for the incentive you provide by showing your concern for the quality of the rising generation, by giving your time in their behalf, and by setting them an example in civic responsibility."

Wilson Carnes
Editor

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The answer is simple. All other combines are built more like stationary threshers. They still have long travel to the cylinder, short separating length, single fan cleaning. That's because stationary threshers were designed for dirt-free, fully-matured crops.

But Allis-Chalmers builds the GLEANER combine specifically for field work. It can handle changing field conditions . . . dirt, dust, uneven ripening, short spots followed by tall, rank growth. That's why the GLEANER cylinder is *down front, close to the crop,* for ideal control of feeding on-the-go.

The down front cylinder also gives more area and more length for separation, plus room for *two cleaning fans.* All this means greater capacity, more and cleaner grain in the tank every time.

So compare—see the difference at your Allis-Chalmers dealer's. See why the GLEANER is the right combine for you—and chances are you'll find the right credit plan to match!

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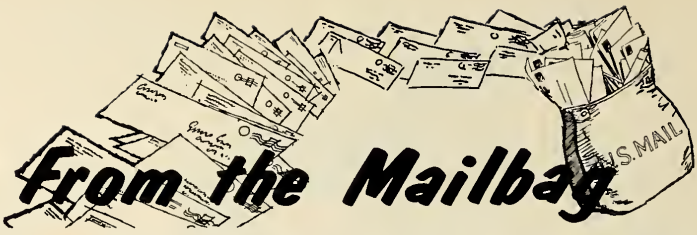

Grayson, Kentucky

I just want to say your article "The In-Between Occupations" was most helpful and very timely.

Being a former American Farmer from Kentucky, I am still interested in the Future Farmer program.

As a counselor, I am very much interested in seeing our Future Farmers advance successfully in today's expanding economy. The two-year post high school institutions are needed very badly and will help bridge the gap in our agricultural advancement.

Lloyd Dean
Counselor
Prichard High School

Phu Cat, Vietnam

My former ag teacher sent me a copy of the June-July issue of *The National FUTURE FARMER*. I really enjoyed it since I used to get the magazine in high school.

I'm a farm boy, and a lot of my men here in Vietnam are from the farm. They saw me reading *The National FUTURE FARMER* and asked where I got it. We decided to write you and see if you could send us a magazine every time it comes out. It would mean a lot to us, and we can also keep up on what's happening in the farming world. Thank you, and I hope you can help us with our problem.

Sgt. Ronald Trebelhorn

Here is a suggestion for chapters. Why not send a complimentary subscription to your former members who are now in service? As you can see, they enjoy reading the magazine, and I am sure would appreciate letters from you. —Ed.

Fort Scott, Kansas

Would you pass my congratulations on to Larry Erpelding. We are fellow alumni of Kansas State University. I believe he will be an asset to the National FFA Magazine staff, as indicated from his previous FFA activities.

I have let my subscription expire. You will find enclosed 75 cents. One might think that an FFA'er would soon lose interest in *The National FUTURE FARMER*, but I wonder if a true Future Farmer ever will. I have seen the latest issue, but will you please start my subscription with the August-September issue.

Alvin Conner

Perry, Oklahoma

I am writing this letter to tell you what a great magazine we have. It can be a real inspiration and boost to your FFA career to see fellow FFA members who have really succeeded.

I am sure that every Oklahoma FFA member read with pride the recent article about David Deason, immediate past president of the state association, showing his soil conservation practices. It shows what determination can do.

Not to pat ourselves on the back, but I feel that the Future Farmers of America should be congratulated for the work it has done for the youth of America. While teenagers riot in our large cities with vandalism, stealing, and killing, while it may seem like it's "in" to live in town and be free as a bird, I think it's the plain everyday farmer that somehow keeps America going. While the government seems against him and no one goes around patting him on the back for a job well done, where would we be without him? A farm boy may have to miss that dance or movie for chores or some farm emergency; but to me, he has so much more in the end. I hope FFA can live on and on.

Daryl Voss

Laurier, Washington

My father receives your National FFA Magazine because he is on the advisory council of the Kettle Falls FFA Chapter. Our whole family appreciates this magazine immensely.

Since I am president of the FHA chapter at Kettle Falls, I especially enjoyed reading the article on "How To Ring Freedom's Bells" in the June-July issue and the different ways the FFA and FHA chapters can work together in promoting citizenship and patriotism in this grand country of ours.

I'm sure that if you have any more good ideas like the ones you have already published, they will be put to good use.

Janice McIrvin
Kettle Falls FHA Chapter

Burlington, Iowa

We have read with interest your article "Will Service Slow You Down?" by Jerome M. Cowle which appeared in the August-September, 1967, issue of *The National FUTURE FARMER*.

Please advise whether it would be possible to obtain your permission to reprint this article with proper credit to the author and to your magazine and what the charge would be, if any, for this privilege.

We would like to use this article in one of our booklets which is distributed to industrial workers throughout the United States and Canada through our Information Rack Centers. Our booklets carry no advertising whatsoever.

We know this article will prove of interest to our readers.

V. Plesscher
Editorial Director
The National Research Bureau

Articles from The National FUTURE FARMER are often reprinted in other publications.—Ed.

(Continued on Page 14)

Road repairs ahead.

Through the blinding rain a voice cuts into your car radio to warn the road's blocked ahead. It's the experimental Driver Aid, Information and Routing system in action. Further on, a beep and a light on the panel signal the stop sign you almost missed. Or you're out of gas halfway to St. Louis in the middle of the night and call in on the two-way radio. Gas comes. And the electronic route-minder guides you to your destination without ever needing a map. General Motors Research Laboratories developed and combined these safety aids to make a prototype DAIR for tomorrow's traffic needs. It'll never replace good driving. But DAIR does make it easier for you to focus more attention on the road ahead. We always try to do the same.

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To help industry expand and grow, Santa Fe's industrial staff stands ready to assist with facts about plant sites across the vast territory we serve with 13,000 miles of track in the Midwest, West and Southwest.

For all shippers and travelers, our cheerful little Chico extends this friendly invitation—"Come along. Travel and ship my way. People expect the best of Santa Fe!"

The railroad that is always on the move toward a better way

Mailbag

(Continued from Page 12)

Cyrus, Minnesota

I would like to inquire as to the source of your data in writing the article in your June-July issue entitled "Driving in Another World." In it, you stated that there were 13,000 schools that had driver-education courses, but only two that had on-the-road night-driving courses. I would like to inform you that the Cyrus school system has a very fine driver-education course which includes night driving, and I am sure there are many more such schools.

Possibly, the statement was made figuratively, but it was very misleading. I do hope, however, that your article encouraged more schools to start night-driving courses.

Sheldon Wiger

We stand corrected.—Ed.

Plainview, Texas

I had to write and tell you how much I enjoyed the article "Will Service Slow You Down?"

I am the mother of an 18-year-old boy who graduated from high school last June and who has just completed six weeks basic military training with the Air Force. I saved the article for him to read, and he really appreciated it. He said it certainly answered a lot of questions he had been asking himself.

From the wisdom of the writer, I can't help but wonder what profession the author is in.

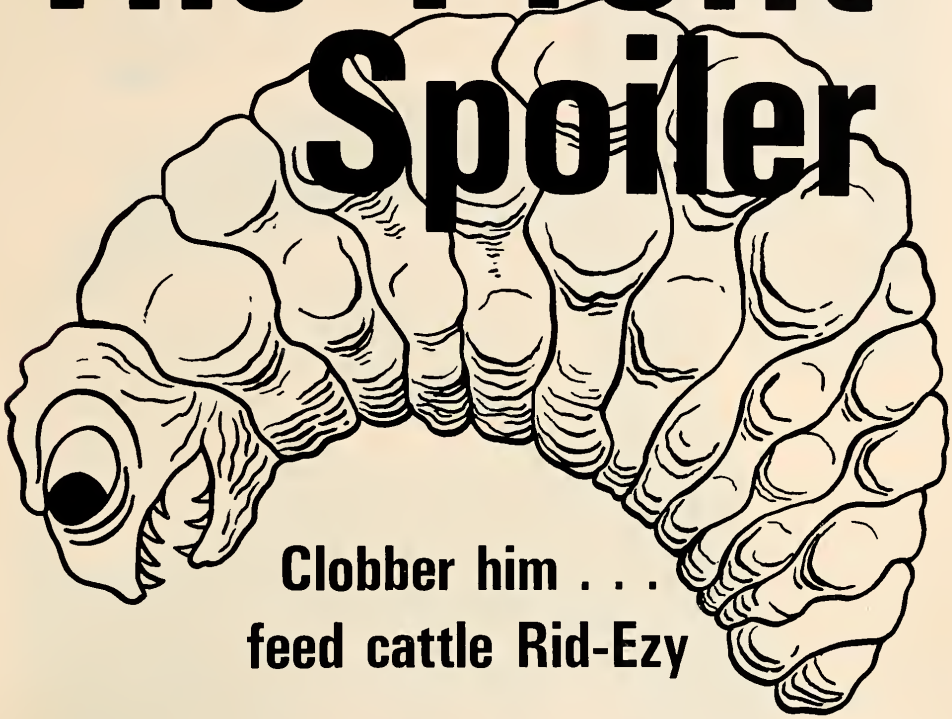
I wish it were possible for every young serviceman in our country to have a copy of the article.

Mrs. Weldon Reed

The author is a veteran and wrote from his own personal experience.—Ed.

Battle Ground, Washington, Future Farmers completing their new free stall loafing shed to house their small Angus herd. The new building was necessitated by the school taking the site of their former buildings for a new school building. It was a happy take over as far as the boys were concerned. Pictured in the construction phase are (left to right): Randy Studer, Dale Jeffries, Ron Cram, and Jack Miller.

The Profit Spoiler



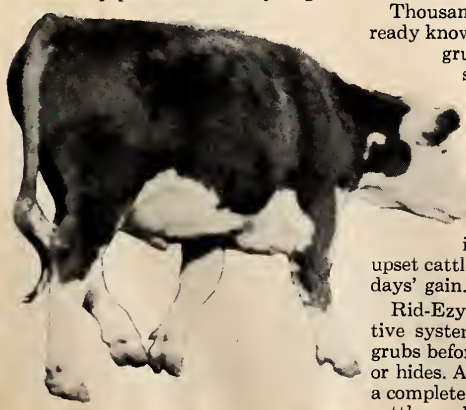
Clobber him . . . feed cattle Rid-Ezy

It's an easy way to make sure the cattle grub doesn't get his hand in your pocket this fall and winter.

A 14-day mixed-feed treatment with MoorMan's Rid-Ezy® Medicated can save you money two ways:

• Grubby cattle are commonly discounted by packers. And if you get a reputation for grub-infested cattle, you may be offered less for all your cattle.

• Clobbering grubs with Rid-Ezy *before* they do their damage saves feed, too. Tests show grub-treated cattle average gaining an extra 1/6 to 1/4 lb per head daily.



Thousands of beef producers already know how easy it is to control grubs with Rid-Ezy—with summer-long self-feeding on pasture or with the 14-day mixed-feed treatment.

Anytime this fall, your cattle can grub-treat themselves at the feed bunk. No working or handling that may upset cattle and cost you one or two days' gain.

Rid-Ezy contains *ronnel*, an effective systemic insecticide that kills grubs before they can damage meat or hides. And Rid-Ezy also provides a complete combination of minerals cattle are known to need.

Rid-Ezy is economical, too—because it takes just a small amount per head to clobber grubs.

With your cattle protected against these feedlot profit spoilers, they're in condition to make fast gains at low feed cost on grain and MoorMan's Mintrate® or Premix-trate® 80 for Fattening Cattle.

Next time your MoorMan Man stops by, do some figuring with him on a MoorMan Program for your feedlot operation—including a starter program for newly arrived cattle.

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That's what the girls are calling the silvertongued lothario with the rusty-lunged muffler he thinks is plenty sound enough 'til the next time he gets to an American Station. All he gets for his love and money is a chronic "KAFF!" and a cold shoulder. Moral: don't be a "KAFF." Stop in for a muffler check at your American Oil Dealer—the guy who puts fire under your hood, without making a lot of smoke about it. Just so he can say, and mean it . . .

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Put into action

Living to Serve

By Honorable Hubert H. Humphrey
Vice President of the United States

RECENTLY I MET with the six young men you elected to serve as your national FFA officers. Do you know what impressed me about your leaders? These young men expected success . . . not failure. In my own state of Minnesota and in my travels around this nation, I've seen this same wholesome attitude developed in chapter and state FFA meetings.

This attitude needs to be communicated to many of our rural unskilled and handicapped young people. This is one of the goals of the President's Council on Youth Opportunity, of which I am privileged to be Chairman. On this Council, the Secretary of Agriculture, the Director of the Office of Economic Opportunity, and other agency heads coordinate federal programs and encourage helpful private programs for deprived youth. And so, I am asking you as individual Future Farmers as well as your teachers of vocational agriculture to reach out with the success attitude into your communities. Your extra effort will mean that needy youngsters of all races and backgrounds will be able to achieve their potential as Future Farmers.

Too many of our rural unskilled young people are migrating to our cities. This may only bring disappointment and add to an oversupply of unskilled labor. America has already seen enough proof of the statement: "The most dangerous creation of any society is a man who has nothing to lose."

Consider this fact: Over one and a half million young people (ages 14 to 24) in the country are looking for work and cannot find it. And the number of young people entering the labor force is steadily increasing. In 1965 alone, 550,000 young people entered the labor force, and there are expected to be over twenty million young people in the labor force by 1970.

More than ever, the high school has the obligation to provide for every student the type of training which will prepare him for the most productive future. Among the programs designed to meet this need, few have a finer record than vocational agriculture. This gives vo-ag a special role to play in helping disadvantaged youngsters in their struggle to become more able students and productive citizens.

A great majority of disadvantaged youth in rural America lack competence, not capability. This is where vocational agriculture and especially the FFA can aid in improving their self-image. You and the FFA can help these students discover themselves . . . who they are, where they are going, and what they can make of themselves. They need to know and be confident of their own abilities; they need to know their deficiencies and what they can do about them.

A vocational educator related to me the story of Charlie Dennis, the nearly blind FFA member who won fame for playing the ukulele at the FFA National Convention. He pointed out how Charlie accepted the learning principles of the FFA creed and how the FFA public speaking contest was a challenge. It was these experiences which led Charlie to discover his hidden talents and develop his abilities.

With the encouragement of fellow FFA members at Dillsboro, Indiana, Charlie discovered what education could do for him. It can do the

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Left to right, with Vice President Humphrey are national officers Keaton Vandemark, Ohio; Richard Morrison, Arizona; Gary Swan, New York; Paul Tarpley, Louisiana; Harold Brubaker, Pennsylvania; and Monte Reese, Oklahoma. The meeting took place in Vice President Humphrey's office.

same for many other young men with emotional, educational, and social inadequacies far less serious than Charlie's.

Unless a student really sees what education can do for him, he may waste time as a "school prisoner," dropping out at the first opportunity. Your recognition of the fact that agriculture is more than farming opens up new opportunities. Last year in Washington, D.C., there was a need for 600 trained horticulturists to become groundskeepers and park and recreation specialists. Yet, there was no one trained to fill these positions. Out of this experience grew the realization that the vocational agriculture program should be reinstated at Phelps Vocational High School.

Tied in with this training is supervised work experience. This is not unlike the supervised farming programs which many of you conduct on your home farms. It is one of the keys to the success of the vo-ag and FFA program. Give a student work that he can do . . . work at which he can find a measure of accomplishment, and you give him, in my opinion, incentive to an improved attitude and heightened ambition.

Ken Kennedy came from a home in Cadiz, Kentucky, where he and his eight brothers read by kerosene lamps. The 56-acre family farm could hardly be considered large by today's standards. His parents had never owned an automobile. In this environment, could any young man be expected to accomplish much? Ken found this challenge in vo-ag and FFA. With the encouragement of his parents, he began sharecropping tobacco. Ambition was born. Ken had passed the hurdle of self-development.

Few people in Kentucky were surprised when Ken became national president of the FFA. Least surprised was Ken's father who said, "It was about five years ago while working in the tobacco fields that Ken had first dreamed of becoming FFA president." The FFA had developed in Ken a feeling of self-esteem and a feeling of worth which helped him successfully cope with his environment.

FFA is working in other ways to help disadvantaged youth. Not long ago in my home state of Minnesota, I helped dedicate a $65,000 speech therapy center at Camp Courage, Maple Lake, Minnesota. Funds for the construction of the building were raised by more than 220 FFA chapters and thousands of FFA members participating in "Corn for Camp Courage" drives. One can only begin to imagine the amount of corn that had to be picked to build this modern facility. These Future Farmers expected success not only for themselves, but for others. With this attitude, they gained as much from giving as receiving.

Vocational agriculture and the FFA have a unique obligation: Your task is to show your concern and exert your leadership so as to serve as a mainspring in improving the lives of the less fortunate. I know you are up to this inspiring task.

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Test yourself...
What do you see in the ink blots?

[1] A bird in a splitting nest?
A fat bunny?
A knight in shining armor on a white horse?

[2] A champion wrestler?
A wise old owl?
Two monkeys?

[3] A handlebar mustache?
A Gene Autry Saddle?
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ANSWERS: 1. If you see a bird: you want to be mothered. A fat bunny: lose weight. A knight in shining armor: you've been watching too many TV commercials. 2. A wrestler: cool, calm, and collected, that's you. A wise old owl: you're smart. Two monkeys: you're funny. 3. A handlebar mustache: congratulations, you're the first to spot this. A Gene Autry saddle: you ought to be in pictures. TOT Staplers: be a TOT Stapler salesman.

The National Convention

Three big action packed days for the FFA!

NEARLY 10,000 Future Farmers and their vo-ag teachers will converge on Kansas City, October 11-13, for the National FFA Convention.

This year the organization celebrates its 40th convention with special emphasis on commemorating the fiftieth year of vocational agriculture. The special pageant on Thursday, October 12, will be "Fifty Golden Years."

President Gary Swan has issued the call to all chapters and state associations to attend this convention—sure to become an important milestone in the history of the FFA and vocational agriculture.

The National FFA Band, 120 members strong, will be on hand again to provide entertainment along with the 80-member National FFA Chorus. These musical groups are made up of members from every state. There will also be an FFA talent program.

Pre-convention activities will include a Vespers program conducted by the national officer team on Tuesday evening. Every session will be jam-packed with important and exciting events—including the American Farmer ceremony; presentation of the Honorary American Farmer Degrees and Distinguished Service Awards to non-members who have given service to the organization; conducting business sessions; recognition of outstanding chapters and individual members who excel in various areas of the FFA; saying thank you to donors to the FFA Foundation; election of national officers; and, of course, naming of the Star Farmer.

There will be plenty to do and see during the three-day convention. Livestock, meats, and poultry judging contests and the national public speaking contest will be conducted. Several educational but interesting tours within the area are planned for members, as well as a trip to the American Royal Live Stock and Horse Show.

A special attraction—"Exploring Your Career in Agriculture"—will feature present-day agricultural career opportunities. Qualified personnel will be at each exhibit to answer all of your questions. The exhibits will be sponsored by national trade associations and professional societies in agriculture.

Exhibits by state associations will offer a wide variety of ideas that might be used to promote next year's FFA week theme—"FFA Challenging Youth in Agriculture." Other FFA exhibits will include those of your National Magazine, Official Calendar, Supply Service, and international exchange program.

Midst the thousands of blue jackets, the pop and flash of cameras, the rousing music of a brass band, plus the excitement and enthusiasm of aggressive young men in action, the FFA conducts its 40th annual National Convention in the Municipal Auditorium in Kansas City.

Will your chaper be represented?

CONVENTION HIGHLIGHTS

TUESDAY, OCTOBER 10

Morning	Registration Officer-Delegate Meeting
Afternoon	Tours to Points of Interest Meeting of State Advisors
Evening	Vespers Program

WEDNESDAY, OCTOBER 11

Morning	Registration Opening Session Posting of Colors Welcome by Mayor Meats Judging Contest
Afternoon	Presenting Honorary American Farmer Degrees American Farmer Degree Ceremony Poultry Judging Contest
Evening	Band Concert National Public Speaking Contest Gold Emblem Chapter Awards

THURSDAY, OCTOBER 12

Morning	Agricultural Proficiency Awards Distinguished Service Awards Pageant: "Fifty Golden Years"
Afternoon	Tours Business Session
Evening	FFA Talent Show Recognition of Donors to National FFA Foundation 1967 Star Farmers Movie Star Farmer of America

FRIDAY, OCTOBER 13

Morning	International Guests Election of Officers
Afternoon	Recess for American Royal Live Stock and Horse Show
Evening	National Officers' Night Firestone Show

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The two-fisted one: The Remington Nylon 66.

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FARMING with a Fine Point

By Len Richardson

IT CAN GET pretty lonely working as a toll taker on the "graveyard shift" for the turnpike that connects Richmond and Petersburg, Virginia.

But M.G. Rainey, Jr., a former vo-ag student and member of the FFA, would while away the slack hours during his shift by figuring out how he could return to full-time farming. "Putting the pencil to it" describes the many jottings he would make on scratch paper during the wee small hours when only a straggling car or two would roll in out of the darkness.

After four years on the job . . . and wearing many a pencil to the nub . . . the Dinwiddie, Virginia, native figured he finally had the answer. In 1962, he said good-bye to the turnpike and began "farming by the fine point of a pencil" on the farm which he had inherited from his father.

"I decided that it would be a single enterprise, mechanized all the way, that one man could handle," explained Rainey as he and Dinwiddie Vo-Ag Instructor P. A. Glass, Jr. led a tour of the farm. "I considered feeder pigs, but I finally settled on beef cattle."

That his ideas were good ones is easy to see today. His attractive farm and home are situated on 225 acres. Two 20- by 60-foot silos stand as landmarks to an efficient cattle feeding operation.

This constantly "putting a pencil to it" seems to be responsible for his success. He also makes it clear that the route into farming won't be any easier for his two sons, Moyland and Jimmy. Jim, the older, completed college this June with a degree in animal science, while Moyland (better known as Mo) graduated from Dinwiddie High School this year.

While Rainey hasn't encouraged his sons to go into farming, he gives this counsel: "If they really want to farm, it is the management that will make the difference. The technical side of farming they pick up in vo-ag and college. What's more, they can always call Mr. Glass at the vo-ag department for advice. The management side is more personal; you've got to live with it and know what you are doing."

Forecasting that profit margins will continue to narrow, Rainey said buying and selling will become increasingly important functions of management. "Consider the price of corn," asserts Rainey. "We receive only about 20 cents more for corn now than when I started farming. That's not much of a pay raise."

Vo-Ag Instructor P. A. Glass, Jr. discusses farm plans with Moyland Rainey and his dad, Mr. M. G. Rainey, Jr.

Mo pointed out that as a result of his dad's management skill he became one of the first farmers in Virginia to feed his cattle urea-treated silage. He's been doing this type of feeding since 1963. "I've found that it's cheaper to feed one pound of urea and seven pounds of corn than it is to feed eight pounds of soybean oil meal," Rainey explained. "As long as I keep this rule of thumb in mind, I can save money."

Fine points like this can save quite a bit. He figures his urea-treated silage gains cost between 10 and 11 cents a pound, compared to a cost of between 16 and 18 cents a pound for feeding grain and hay.

Urea is scattered on top of the silage when the wagons come in from the corn fields. He applies 10 pounds of urea and 10 pounds of limestone to a ton of silage.

The decision to go to silage feeding was another result of his farming by the fine point of a pencil. This was the only answer, he figured, in view of the comparatively small acreage he had available.

"I'd been doing some farming on this land since 1946," he says. "I'd built a 14- by 40-foot silo, but I knew such a size couldn't justify the cost of the machinery I'd need for a feedlot operation. So I tore down that silo and used the materials to build these." Mo explained that the present capacity is about 1,000 tons of silage, ". . . but we are always in the building process."

The Raineys like their silage to contain between 35 and 42 percent dry matter, and prefer not to open the silo until at least a month after the silage has been put up. They usually feed around 200 head of cattle and obtain an average of about 2.88 pounds of gain per day. The cattle stay on silage between 180 and 200 days.

(Continued on Page 48)

Looking for thrills?

If so, here is a teacher of vocational agriculture who has the answer.

John A. Scott

A FEW SHORT years ago as U.S. Navy Commander Alan B. Shepard, Jr. was about to become America's first man into space, our freshman class in vocational agriculture listened intently to the radio commentator's description of this momentous occasion. As the countdown continued, you could feel the excitement and apprehension building up in the classroom. "Five, four, three, two, one, zero . . . lift off!" Commander Shepard was on his way. What a thrill must have shot through this "pioneer."

Several years earlier, as I approached the platform to accept a degree from one of our state universities, I felt a similar tingle of excitement running up and down the spine. I was about to launch a vocational agriculture teaching career. What would it be like out there? What unknown and unforeseen obstacles would have to be overcome? How well would this vehicle, vocational agriculture, perform as it passed from the known to the unknown? Would it withstand the heat of friction as it returned through the barrier of knowledge with new and useful information for the benefit of agriculturalists everywhere?

These questions, and more flashed across this "agrinaut's" mind as I accepted my diploma; a diploma proclaiming I had completed established requirements and was entitled to teach vocational agriculture in the state's public secondary schools.

Soon the thrill and excitement of college graduation was subsiding and apprehension began to build up. Later, as the superintendent of my first school was showing me the facilities and explaining school philosophy, that spinal tingle returned.

Here was a challenge. What are the needs of this community in regard to agriculture? What are the farmers like? What will the students be like? Will they accept me? Will I be taken before their leader for sentencing; or will I become their leader? What lies ahead for me—the first "agrinaut" in this community? Will I measure up to the challenge? Can a mere "earthling" contribute anything to a dynamic agriculture in this community?

To answer those questions, of course, was the real purpose for this "probe" into agricultural education.

Just as astronauts must tingle with excitement at each new discovery, so I thrill with excitement as we progress in agriculture. That is why I have chosen to remain in the profession.

Each new student enrolling in vocational agriculture classes, whether ninth grade or adult farmer, brings with him new challenges for me and new excitement. I walked side by side with a young man from ninth grade through high school graduation and observed his growth in both mind and body. I was in the audience as he won a public speaking contest and remembered him as the freshman stammerer. I listened as he and his teammates discussed how they won the judging contest as we returned home. I pinned a Gold Key of the State Farmer Degree to his blue jacket. I sat at the kitchen table with his mom and dad and aided in drafting a parent-son partnership and helped to plan a budget for college. We rode together in his car to the National Convention in Kansas City, Missouri, where he received the American Farmer Degree.

What a thrill it was to be sitting by the agricultural finance officer of our local bank when he was named outstanding young business man and remember him as president of the FFA chapter.

To observe and be a part of the growth of a high producing dairy herd that began as a "heifer" project gives a vo-ag teacher a feeling of pride. It is like measuring the yield of corn from a field you knew grew 40 bushels less than three years ago, or planning a new granary, loafing barn, or machine shed with the dad following a suggestion from the son.

Each time I explain to classroom visitors what each of the plaques and trophies represent, I relive the excitement of training champions.

How satisfying it is to see a former FFA officer become county president of a farm organization or to see another former officer on the same faculty and holding an office in your local education association.

To disagree with the judge's placings at the county fair, then be reminded that he once judged on your local team; or have a rather "ornery little cuss," while in school, elected to the school board, then find he is one of your stronger supporters of the program can only happen to a vo-ag teacher.

What a challenge it is to have 20-year-old farmers attend your adult farm class—the experienced and relatively inexperienced exchanging ideas and views regarding the needs of our community and how our classes can best meet these needs as we plan ahead.

Excitement! This teacher has a tingling spine almost every hour of the day. What can be more exciting and thrilling than developing dynamic young men to harness a dynamic agriculture for future generations?

And you know what? We are only in the twilight zone. More exciting things are yet to come. Join me in teaching vocational agriculture—I promise you thrills and excitement from your first day on the job. Remember, "He who serves agriculture, serves all mankind."

A National Home for FFA

To meet the challenges of our time, this National FFA Center would advance FFA's objective of developing agricultural leadership and citizenship.

HOW WOULD YOU like to study leadership and relax in this modern Center that hints of eighteenth century charm? One of the nation's top architectural firms has submitted this design to provide a meaningful passage to FFA's past, while presenting an ideal to give direction for the future.

While visiting the Center, you might come face to face with the nation's law makers in Washington, D.C., or find the original Star-Spangled Banner, the Hope Diamond, and John Dillinger's hat (bullet holes and all)!

All this would be possible on your visit, because the nation's capital is only minutes away from the Center. Also nearby are Mount Vernon, Williamsburg, and Monticello . . . important centers in colonial days.

The germ for your visit has already been planted. If Future Farmers cultivate the idea, it will grow and bloom into a reality. The architectural design for the Center and future action will be considered by delegates at this year's National Convention. Last year the Board of Officers and National Board of Directors authorized appointment of a study committee to look into the possibility of developing a National Center on FFA's 35½-acre site near Mount Vernon, Virginia. In July, 1966, the Boards authorized the Governing Committee to proceed with plans and estimates and set up funds to be used for architectural studies.

Also proposed is the development of a travel scholarship program by the FFA Foundation which would enable Future Farmers from every state to attend leadership seminars each year.

Close proximity of the Center to Mount Vernon and Monticello should serve as an inspiration since Washington and Jefferson are recognized as "patron saints" of the FFA. The land owned by the Future Farmers of America was once owned and farmed by Washington. The Woodlawn Plantation,

This architectural model shows design concept of Center with its mirror lake. While modern, it projects the image of eighteenth century village. Present building is at left of photo.

While one unit, this artist's drawing shows how small dramatic forms make it appear to be an early village.

built by Washington for his niece, and his old grist mill can be seen from the site.

The Center will serve as a home for the National FFA Archives. Historical documents, dioramas, displays, and artifacts will be available for study by FFA members and visitors. Other educational or agricultural organizations using the FFA's conference facilities will be made aware of the FFA's dynamic role in agricultural education in the United States. This will give the Center an important public relations role in telling the FFA story.

Here will be an excellent place for constant leadership training seminars, educational conferences, meetings of the Boards of Officers and Directors, Trustees, special study committees, Foundation Donor meetings, and other meetings which aid in developing objectives and programs that give direction to FFA and vocational agriculture.

An already expanding international activities program fits into the purpose of such a Center. Electronic equipment in the Center will provide for instantaneous language translation, press and TV coverage, and have the latest in audio-visual aids. A National Center will provide not only facilities, but also personnel and training tools needed in this important and growing phase of FFA activity.

The site purchased by the FFA in 1939 is approximately 20 miles from downtown Washington D. C., and only three miles from historic Mount Vernon, Virginia.

While avoiding the confusion and congestion of a downtown location, the accessibility to these attractions would draw conference participants on a national and worldwide basis.

The site for the National Center is 30 minutes from the core of commercial and governmental activity, and only 20 minutes from Washington National Airport. Important to future access is a proposed route of rapid rail transit located adjacent to the site along U.S. Route 1, which will mean express service between the Center and Washington in future years. By air, the capital city is less than two hours away from 75 percent of the nation's population.

The National Center would be designed to accommodate educational conferences with maximum attendance for 350 persons. Basic design of the Center is functional with a great degree of variability in size of meeting space required.

The first stage plan calls for construction of housing for 150 persons. Additional stages can be built as funds become available. This would bring housing capacity on a par with meeting capacity.

The design concept of this Center is one of creating a twentieth century building which maintains and projects the visual concept and scale of an earlier period. In order to accomplish this, areas have been separated into units where each function can be expressed in plan and elevation. The result is a cluster of small dramatic structures reminiscent of an eighteenth century village. In the eighteenth century, the individual structures were focused on the "village green": in the conference Center the individual spaces are focused on the "Great Hall." This "Great Hall" is connected by skylighted colonnades to its outlying activities.

The smaller units are designed as brick masses linked by openings of glass similar to the solid-void relationship created in the eighteenth century by spacing buildings with passages between. Throughout the conference Center complex, a terrace and garden setting is planned at all levels which links man with his interior and exterior environment. Taking advantage of the various open spaces created between units and on the roofs of some areas, terraces and plantings act as a transition into the meadow surrounding the complex.

The primary use of the building will be by youth, and for this reason it must be youthful, energetic, and assertive building. It must be exciting and inspiring as it serves as the home of the Future Farmers of America and the host of many and varied conferences. In detail, the satisfaction of this demand is achieved with mezzanines, balconies, bridges, steps, skylights, and a variety of spaces designed to evoke an emotional reaction related to the learning process.

Having read this, look again at the color photo and sketch of the Center, and you will conclude that no other facility will quite do for this long journey into FFA's past, present, and future.

STAR FARMERS

Bill Roberts
Hahira, Georgia
Southern Region

Chores Become A Challenge

WHY IS IT that, for some, work becomes first a chore, then a grind, and finally drudgery? While for others like Bill Roberts, Star Farmer of the Southern Region, chores become first a challenge and finally a calling. Bill Roberts' story provides some clues.

First consider the results of this attitude. Today he is a full partner with his grandfather in the operation of a 170-head dairy that features 80 producing cows. In addition to the 214-acre home farm, the partners rent 111 acres to raise corn and other feedstuffs. They also raise 4½ acres of tobacco as a cash crop.

In all, Bill has assets of $97,615. Liabilities of $17,500 bring his net worth to $80,115. His dairy farming program has shown a labor income during the period covered by his records of $48,080.66.

Bill has always lived with his grandparents on their dairy farm. Instead of developing a resentment toward the long hard hours on the dairy farm, he grew to appreciate it and to care for the animals.

By the time he entered high school, he was beginning to take a real interest in the farm. "We had a 255-gallon bulk tank and were producing 100 gallons of milk per day," explained Bill. "It was during this year that I really became interested in the farm and knew that the practices and skills I learned in my classes of vocational agriculture could improve our farm."

Caring for calves is one of Bill Roberts' many chores. The dairy partnership also includes 80 producing cows.

During Bill's junior year in high school, he bought one-third interest in the dairy. When his grandfather became ill, he took over the entire operation.

It was during this period that Bill set out to make some improvements on the farm. "I traded the 255-gallon tank for a 420-gallon tank and cleared 65 acres of waste woodland," asserts Bill. He also sowed 35 acres of White Dutch Clover and sprigged some Coastal Bermuda.

During his senior year in high school, Bill increased his share in the dairy operation to full partnership and purchased 20 additional heifers. With an increase in milk production, another 255-gallon tank was added along with a pipeline unit and automatic washing system. The partners were now selling 300 gallons of milk per day.

While on a heifer buying trip in South Carolina, Bill got an idea. He relates, "I saw silage that had been cut and packed on top of the ground. I decided this might work for me, and we cut 20 acres of corn silage and packed in this manner. This was the first silage cut and stored by this method in our area."

Following graduation, Bill commuted to Abraham Baldwin Agricultural College for four quarters and, in spite of regular dairy chores, made the dean's list for two quarters. However, Bill soon found the farm required his full attention, and he dropped out of college; but not before Judy Prysi agreed to become Mrs. Roberts. They were married in September, 1965, and the couple built a two-bedroom brick home on the farm.

"My grandfather and I can see many changes and improvements in our farm in my own lifetime," declares Bill. "Twenty years ago, milk production was 30 gallons per day, and cows were producing about 4,500 pounds annually. Today, we are producing 350 gallons per day, and the cows are producing 12,000 pounds of milk per cow annually."

How has the farm changed? "Corn production has increased from 30 to 100 bushels per acre," continued Bill. "I contribute this to new practices I learned in vocational agriculture. Because of better fertilization, along with green chopping, the carrying capacity of our pasture has greatly improved. And another thing, twenty years ago only 40 acres of our farm was under cultivation. Today, 185 acres are under cultivation or in pasture. Six years ago, we rented no land. Today, we rent 107 acres."

Bill studied vocational agriculture under Price Turner. He was an outstanding student, president of his junior class, and an officer of the Hahira FFA.

Now that dairy chores have become his calling, Bill wants to increase his herd to over 100 head and increase production to 15,000 pounds. He also believes his corn production can be increased to 140 bushels, or 20 tons of silage per acre. Bill Roberts can always find a challenge while doing his chores.

OF AMERICA

William Falls
Stet, Missouri
Central Region

A Growing Livestock Farmer

VOCATIONAL agriculture and the FFA have exerted an influence on William (Bill) Falls similar to gravitation in reverse. The pull has always been upward! This force, and Bill's own initiative, have propelled a grade calf into assets of more than $87,000. Today, he is Star Farmer of the Central Region.

Bill's farming program this year includes an 80-acre farm which he owns plus 530 acres of cropland and pasture that he rents. He shares the rental of another 140 acres with his father, bringing a total of 750 acres under his command. In addition, he owns 270 head of hogs, and 70 of these are sows and bred gilts. His cattle enterprise includes more than 90 head which he personally owns and an additional 40 head which he owns in 50 percent partnership with his father.

Since he entered vocational agriculture in 1962, Bill's records show a labor income of approximately $40,000. His total assets amount to $87,761. Bill's mortgages and other liabilities amount to $30,840 which leaves him a net worth of $56,921.

Beginning with a grade Jersey calf, Bill's farming program has grown in leaps and bounds . . . like a jackrabbit in front of a prairie fire. He described the development of his farming program, "When I was nine years old, my dad gave me a grade heifer, and I bought a Western ewe with money I had saved from working at home. I sold this ewe and lamb and bought a Poland sow. The next year, I bought another sow and two Chester White gilts in addition to a gilt I won in a judging contest."

This domino scheme of buying, selling, and growing continued when Bill entered high school. He continues, "That year I sold the Jersey cow, and with money from calves I bought a registered Angus cow and calf. With money earned from my hog enterprise, I purchased breeding stock in Illinois, Iowa, and Ohio to begin a Chester White herd." With help from his parents, his brother, and the Production Credit Association, his cow and sow herds continued to grow. By 1965, he was able to buy an 80-acre farm.

Bill rents his additional cropland from a neighbor and the Doane Agricultural Service. Both income and expenses are on a fifty-fifty basis. "On the pasture that my dad and I rent together, I pay half the cash rent," responds young Falls. "I also work for my dad to pay for the use of home buildings, land, and machinery which I don't have."

It is interesting to note that one of the first vocational agriculture shops in Missouri is located on the Falls' farm and has been remodeled into a modern 15-stall farrowing house. Bill and his brother have constructed movable hog houses in the vo-ag shop. The fattening and growing pigs are divided into five lots, each with automatic metal feeders, natural shade, and running water on concrete floors.

Sows raise an average of 9.4 pigs per litter, and the gilts raise around 8.2. Bill keeps sows as long as possible because more and bigger pigs are produced by the older sows. Bill often goes out of state to purchase breeding stock.

William and his father have streamlined their cattle feeding operation by constructing concrete fence-line feed bunks and automatic cattle watering systems. The cows, heifers, and calves are all of good breeding, and the steers feed out well, gaining around 2.7 pounds per day.

Crops are fertilized according to soil tests, and nitrogen is used as a starter. Crop yields run approximately 95 bushels per acre for corn, 32 bushels per acre for beans, and approximately 40 bushels per acre on wheat.

In fact, it can be said that young Falls stresses high quality in his farming program. He has won numerous prizes at fair and livestock shows. The Stet FFA Chapter's livestock judging team, of which Bill was a member, won Gold Emblem in the national contest last year. His teacher of vocational agriculture is Kenneth F. Nofftz.

One of the few things Bill doesn't own is a car. He explains this away by saying he plans to buy more land and increase his beef operation. It is a plainly visible sign that discipline and determination are the real fuels that ignite a Star Farmer.

Bill averages 9.4 pigs per litter in his swine program.

STAR FARMERS

David Mosher
Greenwich, New York
North Atlantic Region

More Than A Dairyman

TO BE SURE, David Mosher is a successful dairyman. He won the title of Star Dairy Farmer of America (1965) to prove it. But he's more than a dairy farmer. FFA's new Star Farmer for the North Atlantic Region is one of an increasingly small group of dairymen who are developing cow families with a depth of breeding to insure the future of this industry.

David is in partnership with his mother in operating a 218-acre dairy farm, including 37 producing cows with 29 heifers and calves coming on for replacement and addition. Most of young Mosher's cattle are registered.

During the period covered by David's records, his share of the farm's earnings amounts to nearly $20,000. It should be noted that he is the youngest of the four Star Farmers. Mosher has earned assets amounting to $63,751.50. He has notes to be paid in the amount of $13,050.00 which leaves him a net worth of $50,701.50.

The development of these assets is also a story of courage and determination (see June-July, 1966, issue, pages 20 and 21) since David's father died, the dairy herd was sold, and he fought a successful year-long bout with polio all in the same year.

It was while recovering in a Schenectady, New York, hospital that he set down the blueprint for rebuilding the dairy herd.

The success of this breeding program is best pictured by the cow . . . Birch Hollow Ormsby Bennie. She is David's first "homegrown" cow to be classified Excellent and has produced over 23,000 pounds of milk as a three-year-old.

David and his mother operate the farm in partnership.

David recounts the rebuilding process. "In 1962, at the death of my father, we dispersed the herd, which was made up of Ormsby breeding. At that time, we retained three cows and the young stock, made up largely of King Duke daughters. One of the first heifers to freshen was the youngest great granddaughter of Broadfield Jean. She has been classified Very Good (score of 86), and also produced over 23,000 pounds of milk in 365 days as a three-year-old."

David then purchased four granddaughters of ABC Reflection Sovereign and a few other Rag Apple-bred females and proceeded to use Lakefield Fond Hope extensively. "Our Lakefield-bred cows are now freshening," points out David, "and we are following this breeding with Ideal Fury Reflector and Bennie's Thonyoma Ormsby Senator. We intend to linebreed to Wis Burke Ideal (both Fury and Senator trace to Wis Burke Ideal with some Rag Apple blood) and thereby hope to breed cows with correct legs and udders, more stretch and openness than usually found in the Burkes and, of course, high production."

The results of this superior breeding program is already showing up. David's herd average is 17,014 pounds of milk and 632 pounds of fat. This production far exceeds the top 10 percent of commercial dairy farms in New York. Recently one of his cows produced 130 pounds of milk in one day on official tests.

Another compliment to his breeding program is that the third largest breed organization in the United States has contracted two cows from David's herd, with the option to buy bull calves produced by these females. Recently, another cow was officially ranked as the third highest producer in her age class in the state. This year that cow has already produced over a thousand pounds of fat and is still lactating. This cow's son was sold to the largest dairy farm in South America at Buenos Aires, Argentina. He placed third in his division at the South American International Show. "We saved semen from him for use in our breeding program," adds David.

Labor is a critical problem on many dairy farms but one that David has licked. "With the completion of my 108- by 38-foot barn, my mechanization program will be stabilized toward efficiency on a commercial basis. High milk production and proper management are more important, in my opinion, than having large numbers of cows with high labor costs," declares David.

Looking to the future, David says, "Our goal is a herd average of 20,000 pounds of milk. Dairy farming is both my business and my pleasure, and I have every hope and intention of continuing this vocation for many years."

David has won numerous prizes exhibiting his cattle at fairs and shows. In high school he served one-year terms as president and secretary of the Greenwich FFA Chapter and as his class president for four consecutive years. His vocational agriculture instructor is Bruce W. Emanuel.

OF AMERICA

Rande Kummer
Deer Park, Washington
Pacific Region

Seven Years Of Progress

"I SUPPOSE you could say that I was born to be a farmer," affirms Rande Kummer, Star Farmer of the Pacific Region. Married and a full-time dairy farmer, it is hard to believe that he is the same crew cut high school freshman who, with a boyish grin, once dreamed of, "having a dairy operation comparable to Carnation Farms."

While it would be hard to claim that Rande has duplicated Carnation Farms, his seven years of progress have been staggering. Starting with one beef calf, he has developed a farming program that today includes 81 head of Holstein dairy animals, 51 of which are milking. Recently, he and his father purchased, on a 50 percent partnership basis, a 268-acre farm to add to the original 329 acres owned by Mr. Kummer. While the cattle belong to Rande, he operates the dairy in 50 percent partnership with his parents, exchanging his cattle for their land.

During his seven years of progress, Rande shows a labor income of $26,841.82. His total assets amount to $86,966.62. Mortgages and other liabilities bring his net worth down to a substantial $70,066.62.

"As long as I can remember, Dad and I have been working and planning together," asserts Rande. "My earliest recollections are those of Dad taking me with him while doing various farm chores." However, it was during Rande's freshman year in high school, as a student of vocational agriculture, that he really became interested in dairying.

About this time, Rande's parents were seriously considering selling their small herd to go into the beef business. After much discussion, arrangements were made so that Rande could purchase the remaining dairy animals and start a dairy career of his own.

While it is difficult to briefly describe Rande's achievements during the past seven years, these seem to stand out. His herd has increased in size from three grade Holsteins to 81, 35 of which are registered. Production per cow has increased each year with a record high of 52 pounds butterfat and 1,500 pounds of milk for the month of May, 1967. He maintains a rolling herd average of 14,192 pounds of milk and 533 pounds butterfat.

Selective breeding has improved the type and production of heifers with a number of D.H.I.A. records indicating as high as 15,450 pounds of milk and 636 pounds of butterfat during the first lactation.

Another sign of progress is the extensive farm improvements. These include a new milking parlor, free stall housing shed, and liquid manure system (underground). The parlor consists of a new Ross Holm system and DeLaval fast milkers. The old stanchion barn was remodeled to provide feeding area for 50 cows, and a woodshed was rebuilt to accommodate calves. Now under construction is a machine shed and heifer barn combination which will provide shelter for 50 young animals. The free stall housing area will have an underground liquid manure system.

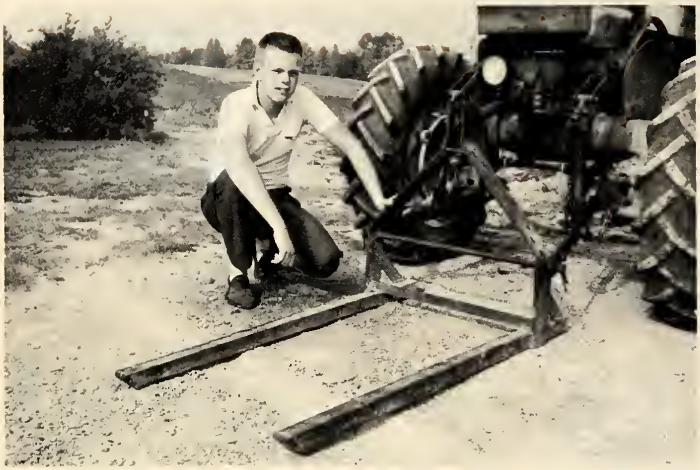
The extent to which Rande and his father improved the farm can be noted in increased value. The 258 acres they purchased next to their farm cost $56.00 per acre. Today that same farm is valued at $200 per acre and includes an excellent alfalfa field and water rights for irrigation.

One of Rande's dairy improvements has also led to improved hay yields. The use of liquid manure from his new system increased yields from one cutting to three.

Young Kummer was national winner in 1964 of the Star Dairy Farming award for outstanding achievement in dairy farming. He has won numerous awards exhibiting dairy cattle and participating in FFA judging contests. He has been a member of the Spokane Holstein Club's board of directors three years and served as association president last year. This year, Rande is serving as president of the Inland Empire Spring Dairy Show. His teacher of vocational agriculture is Norman O. Warren.

Future plans call for a new home ("My wife Pat and I will do a great deal of the work"), a modern fire-proof shop, and contract selling of breeding stock. "Truly, the past seven years have been wonderful ones for me and our family," says Rande in conclusion.

Rande does his own milking in these modern facilities.



Future Farmer Richard Bailey of the Tunstall, Virginia, Chapter constructed this back-saving farm shop project as a part of his vocational agriculture shop work.

Farm Shop Feature

A Platform Lift For Your Tractor

Carrying heavy bags of fertilizer across fields where you can't go with your truck or trailer, struggling with a hog crate to load it in a truck, or wrestling with a piece of machinery in an attempt to load or unload it are all out of date. Use your tractor hydraulic power to do the lifting.

This handy platform lift for 3-point hitch tractors will do the work for you.

Construction Procedure

Cut out all pieces as listed.

Place the two pieces of angle iron that will be used to form one of the forks so that they form a box-like tube. Tack the two pieces together, making several tacks on each seam about 12 inches apart. Then weld the entire seam. Construct the other fork in the same manner. After constructing the two forks, cut off the ends of the forks to a 45 degree angle.

Space the two forks, with the 45 degree angle ends farthest from the tractor hitch end of the lift, 29 inches apart measuring from the outside of one to the outside of the other fork. Considering the angle iron brace to be L shaped, place the L so that the bottom leg of the L points to the front of the lift. Weld this brace 10 inches from the front edge of the lift to the back edge of the angle iron and even with outside edges of forks welded together in previous step.

Heat the upright strap 11½ inches from one end and bend to a 140 degree angle for the bottom part of 3-point hitch attachment. Bend the other end to a 220 degree angle, leaving a 5½-inch leg of the angle for the top part of the 3-point hitch. Do the same to the other upright strap. With a 57/64-inch twist drill, drill the holes for the lifting rod 11 inches from the end of the strap and in the center of the metal. On the other end of the straps, drill the same size hole in the center of the upright projections. Next, weld the two straps on the forks so that the angle iron brace is centered on the straps.

Using a ½-inch twist drill, drill holes in ends of lifting rod ½ inch from the ends. Round off ends of rod for ease in attachment and for safety. Weld rod on underside of upright straps.

Heat and bend the ends of the upper brace 3 inches long to 130 degree angles. Place under upright strap projections at top and weld in place.

Cut ends of lower braces to 45 degree angles. Place braces so that one will rest on fork and the other end is even with rear edge of upright strap and weld in place.

Position rear caps on 45 degree angle end of forks and weld in place.

Mix portland cement to sand in ratio of 1:2 and fill forks ¾ full. Place reinforcing rod in center of forks and finish filling. After concrete sets, weld front caps in place. Clean and paint as desired.

This idea was submitted by Mr. J. W. Thomasson, vocational agriculture instructor at Tunstall High School, Dry Fork, Virginia. The lift was constructed by Richard Bailey as part of his classroom shop work.

Bill of Materials

Angle Iron	4 pieces	1½" x 1½" x ⅛" x 58"	Forks
	1 piece	1½" x 1½" x ¼" x 29"	Angle Iron Brace
Flat Iron	2 pieces	½" x 4" x 36"	Upright Straps
	1 piece	⅜" x 3" x 9"	Upper Brace
	2 pieces	¼" x 2" x 12"	Lower Braces
	2 pieces	¼" x 2" x 2"	Front Caps
	2 pieces	¼" x 2" x 2½"	Rear Caps
Round Iron	1 piece	⅞" x 34½"	Lifting Rod
*Portland Cement	4 quarts		1:2 Mixture
*Sand	8 quarts		
*Round Iron	2 pieces	⅝" x 58"	Reinforcement
E6013 Electrodes	50	⅛" x 14"	Mild Steel

***Where great strength is not needed, the concrete may be omitted. This will save a great deal on weight and will help to hold down cost of construction.**

Editor's Note: The National FUTURE FARMER *needs farm shop project ideas of items that FFA members can build. We will pay $20.00 for the best idea published in each issue and $10.00 for each additional item used. Submissions must include a clear black and white photo along with a brief yet complete description of materials used and a few pointers on how to build.*

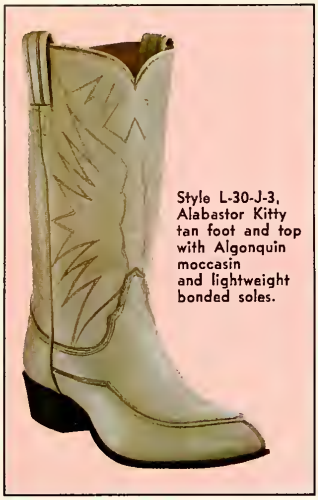
To make the world's finest boots Tony Lama searches far and wide to get the leathers! As you look through these pages you will see why Tony Lama bootmakers have the top reputation for styling unusual hides and finishes. Every leather is crafted by hand into unmatched authentic western styles which have created Lama's fifty-five years of bootmaking leadership.

The Elephant has been used for centuries to do some of man's toughest work. The Romans used these highly intelligent and easily trained beasts in warfare. The tusks provided the only valuable part of the animal until Lama's leather hunters learned how to tan the hide to create a tough but comfortable leather. Lama's new Elephant hide boots are big news in the boot world.

Unquestionably the toughest leather of them all, Sharkskin's distinctive furrowed grain makes it a handsome styling leather as well as extremely durable. There is a major difference between the artistic way Tony Lama's handcraftsmen work the leather with special new soft-tanning processes and the frightening task of bringing one of these critters out of the sea.

Tony Lama CO. INC.

WRITE FOR THE NAME OF YOUR NEAREST DEALER 1137 Tony Lama Street, El Paso, Texas 79915



Style L-30-J-3, Alabastor Kitty tan foot and top with Algonquin moccasin and lightweight bonded soles.

Style L-1539J-3, treebark Kitty tan foot and top with algonquin moccasin and lightweight bonded soles.

Style L-1539-J-3, aniline benedictine Kangaroo with chocolate genuine Alligator wing tip and lightweight bonded soles.

Tony Lama offers a fine selection of ladies boots which are distinctive, feminine—and handcrafted too, exactly like the men's for genuine comfort and long wear.

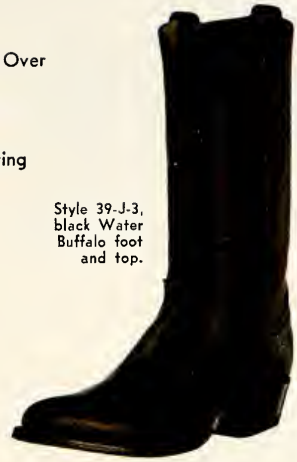
For work or dress in style and comfort, wherever you go there is a Tony Lama boot for you. Lama's imaginative design and authentic western styling will be recognized as the best everywhere! Choose Tony Lama boots . . .

DECIDE WITH PRIDE!

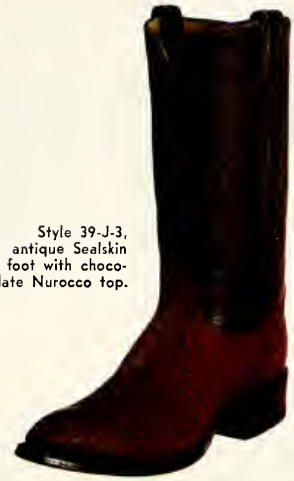
Whales, the giants of the sea, are kept warm by thick layers of blubber covered by a surprisingly thin layer of skin. When Tom Edison started the revolution to electric light, the oil in Whale blubber became less in demand. But with the hard work of modern tanners and the talented toil of Tony Lama leather craftsmen, the skin of the Whale is becoming one of the most popular new boot leathers.

The world's greatest leathers are worked by hand to create Lama's magnificent styles. Over twenty-seven hand operations go into the making of every Tony Lama boot. You would have to go a mighty long way to beat Lama's great combination of expert handcrafting and the world's finest leathers.

Tony ★ Lama CO., INC.



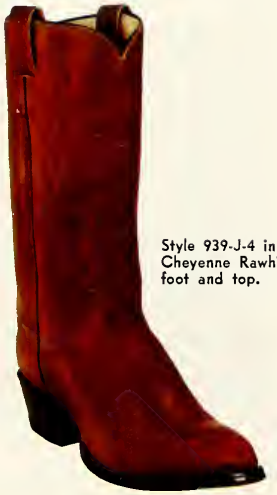
Style 39-J-3, black Water Buffalo foot and top.



Style 39-J-3, antique Sealskin foot with chocolate Nurocco top.

Style 182-T-3, in aniline tanned sorrel Kangaroo

Style 195-T-3 in aniline tanned treebark Kangaroo



Style 939-J-4 in Cheyenne Rawhide foot and top.

Style 520-T-4, genuine chocolate Sea Turtle with algonquin moccasin styling.

Style 521-T-3, chocolate genuine Alligator foot and top. Top features new diamond-pieced pattern and foot is in algonquin moccasin styling.

GOLD LABEL BOOTS

These are the ultimate in bootmaking. Lama's Gold Label boots feature outstanding leathers and extra attention to finish and detail. They are the finest you can buy—anywhere!

SHOW BUSINESS CELEBRITIES

Their shelves full of awards tell the story: singer **BUCK OWENS** and his Buckaroo Band are everybody's favorite now days in the Country-Western music world.

CHARLIE WALKER, one of the Country-Western music's brightest stars, hails from San Antonio, now makes his home in Nashville, and travels the world over entertaining millions with his special brand of song styling.

All-time great singer-band-leader **HANK THOMPSON** has turned the trick that makes a real pro; he has stayed on top with consistently good Country-Western music for two decades.

WILBUR PLAUGHER is a rodeo-contestant, turned rodeo-clown, turned movie-star—and everyone who has seen him in action knows he is great at all three!

SLIM PICKENS, who spends most of his time now starring on TV and in the movies, traveled the rodeo circuit as contestant for a lot of years before going to Hollywood.

All over the western entertainment world Tony Lama is the personal choice of the top stars. Take it from me, and from my friends whose pictures are shown here, Tony Lama is first place every place with us!

Rex Allen

Style 07-J-5 in Gunstock foot and top.

IN STRIDE WITH THE STARS

Style 200-J-3, chocolate Cariobu on chocolate Calf in new algonquin, moccasin styling

FAMOUS RODEO PERFORMERS

A man who is building a legend, **DEAN OLIVER** is already tied for the all time most Calf Roping titles and has stacked up three All Around Championships in the process.

This year's World Champion Bull Rider **RON ROSSEN** won the title once before and has twice captured the NFR championship with his special brand of muscle and guts!

Rising fast in rodeo circles, ex-collegiate star **SHAWN DAVIS** won the 1965 World's Bronc Riding Championship and has been selected to serve on the R.C.A. Board of Directors.

The Rodeo World selected charming **NANCY ANN SIMMONS** of Omaha, for her beauty, taste in western dress, and horsemanship, to reign this year as Miss Rodeo America.

1965 World Barrel Racing Champion **SAMMY THURMAN**, whose Indian heritage is evident in her beauty and riding ability, is performing her riding skills before new audiences in a recently launched movie carrer.

THE CHAPTER SCOOP

news, notes, and nonsense from everywhere

by Jack Pitzer

In Hobbs, New Mexico, blue and gold trash cans, old oil drums painted. Marked "Help keep the city clean. Sponsored by *Hobbs* FFA Chapter."

N-N-N

Members of *Fernley,* Nevada, Chapter who make school honor roll or honorable mention get 75 cents.

N-N-N

Local sponsors provide farm identification signs for new members of *Paris,* Missouri, Chapter. Also sponsor Official Calendar.

N-N-N

Roland Pederson, *Burlington,* Oklahoma, Chapter reporter, reports two public relations efforts. Built gates and panels for fair. Rebuilt FFA emblem for state convention. Emblem's eagle has 12-foot wing span.

N-N-N

Nite Horse Show sponsored by *Tecumseh* Chapter, New Carlisle, Ohio.

N-N-N

Out of thousands of fund-raising projects, here's one! A buffalo raffle by *Omaha South,* Nebraska, Chapter.

N-N-N

Illinois Future Farmer **Jim Quinton,** Heyworth, is also president of state Flying Farmer Teens.

N-N-N

Culbertson, Joliet, Stillwater Valley, Cascade, and *Huntley Project* Chapters won Gold Award for chapter scrapbook event in Montana.

N-N-N

Scotland, South Dakota, Chapter is considering whether to buy a camera to be used for FFA activities. Sounds like good idea. Will mean lots of publicity and a complete scrapbook.

N-N-N

Future Farmer **Ralph Walker, Jr.,** *Clinton Central* FFA, Indiana, one of two "Top Teens." Named at National Youthpower Congress, along with Marie Fulgham, FHA girl from Mississippi.

Vespers at Kansas Convention set the mood for activities. Music by *Eskridge* Chapter Glee Club.

N-N-N

First place in Virginia forestry contest went to *Louisa* Chapter. Members took "Keep Virginia Green" training. Assisted in forest fire control at request of local forester.

N-N-N

Essex County, Massachusetts, FFA presented two scholarships to members. $150 each. Half repayable at later date.

N-N-N

Thinking ahead? *North Kingstown,* Rhode Island, Chapter already ordered next year's chapter supplies from Future Farmers Supply Service. Good way to beat fall rush. Avoids delays.

N-N-N

Scholarships are handy sources of income for FFA'ers who go to college. **Douglas Jensen,** Shelley, Idaho, one of many Union Pacific Railroad scholarship winners.

N-N-N

President of *Tolt-Carnation* FFA, **Steve Sinnema,** copped grand champ for fitting and showing. Showed his Holsteins at Western Washington Fair.

N-N-N

Merrill Babcock lead fellow *Hamilton,* New York, members to victory in chapter meeting contest. Chapter awarded $30 and plaque.

N-N-N

Wayne Debrick—Star Farmer of Oregon. Lives on 1½ acres, rents 65. Does custom work. President of *Crater* Chapter.

N-N-N

Barboursville, West Virginia, Chapter initiated Greenhands at state camp. Good setting. Added study of wildlife and forestry, despite the weather.

N-N-N

Garnavillo, Iowa, Chapter decided to buy a new United States flag.

Lost at Michigan FFA Convention —one pair green trousers, game room of West Shaw Hall.

N-N-N

Waseca, Minnesota, Chapter whipped *Ellendale* in softball game, 21 to 12. Tip from Steve Stiernagle, Waseca Chapter reporter.

N-N-N

Members, dads, and Honorary Chapter Farmers were guests at *Allentown* Chapter barbecue, Milton, Florida. Beef raised by chapter. Advisor Harold Smith says it was a success.

N-N-N

Two wins and no losses for '67 softball champs at Virginia State Convention. *Southside* Chapter.

N-N-N

Sweep in front of our own doors. Good place to start public relations—clean up around shop and ag building.

N-N-N

Jerry Danielson of *Eaton,* Colorado, tells a true (?) story. Seems vo-ag teacher built a complete lamb creep feeder all in one class hour. Told students they could do more in shop if they'd put their minds to it. Greenhand said, "Yes, but we're not ripened with wisdom like you."

N-N-N

Hoosier Star Farmer is **Mike Meritt.** Neighbors call him an innovator.

N-N-N

"Colors to Live By" was *San Benito,* Texas, Chapter's theme for educational exhibit. Took top prize at Rio Grande Valley Livestock Show.

N-N-N

Star Farmer of South Carolina, **Eddie Johnson,** added $200 to his bank account from FFA Foundation.

N-N-N

Happiness is a full basket. So keep shoveling it in (news, notes, or even nonsense). Fill our basket with what's happening in your chapter.

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Cures For Tractor Power Loss

By Melvin Long

POWER OUTPUT of a tractor engine can decrease gradually with use. Often this process goes unnoticed, especially if the tractor is being used on part-load jobs. However, when once again placed under full load, this long-developing condition becomes apparent.

Cause of this difficulty is more troublesome to locate than is a condition which prevents the tractor from running at all. However, a careful systematic check of tractor components usually pinpoints the cause. Sometimes the cure is relatively easy and simple. In other cases, the services of your dealer may be required. Here is a step-by-step check you can make:

1. Fuel cap must be opened for proper operation of the fuel pump. Plugged vents can be opened with a fine wire or by washing the cap in solvent and blowing clean with compressed air.

2. Fuel filter must be clean enough to permit flow of adequate fuel supply. Check operator's manual for instructions on cleaning filter on your tractor. If the fuel line is opened on diesel tractors, the fuel-supply system may require bleeding of the air to restore proper operation.

3. Governor linkage adjustment determines engine speed in relation to setting of hand throttle. Refer to owner's manual for details of adjusting governor linkage to obtain rated engine speed.

4. Fuel viscosity affects performance of diesel engine injection pump. Fuel with too low viscosity (too thin) causes the pump to slip. Use a fuel with higher viscosity to restore normal operation.

5. Clogged muffler chokes flow of exhaust gases from engine. Check muffler condition by removing the muffler and observing effect upon engine performance. If it improves greatly, the muffler should be replaced.

6. Air pre-cleaner is intended to keep large pieces of trash from entering the air cleaner itself. However, if this trash builds up on the screen, it can choke off flow of air to the engine.

7. Air cleaner must be able to handle adequate flow of air for satisfactory burning of the fuel. Contaminants collect in the oil cup whenever the engine is running. If the build-up becomes great enough, the engine is choked and cannot develop full power output.

8. Engine temperature must be in the normal operating range for good performance. Below-normal temperatures which result from operating the tractor without a thermostat increase engine wear, in addition to reducing power output.

9. Valve clearance and condition must be right for good compression. Burned valves need grinding and perhaps replacement, but clearance can be easily adjusted. Correct adjustments contribute to longer valve life in addition to helping power output.

10. A slipping clutch wastes engine power and causes damaging overheating. Clutch linkage free play decreases with clutch wear. Thus, the linkage must be adjusted occasionally to restore the necessary free play.

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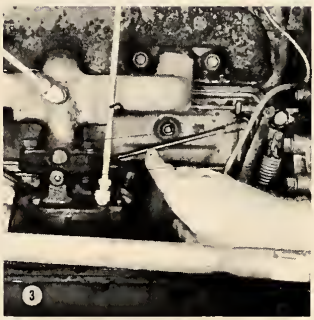
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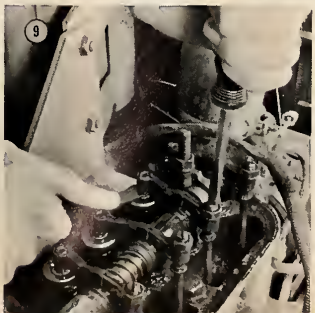
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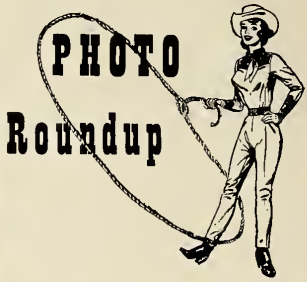
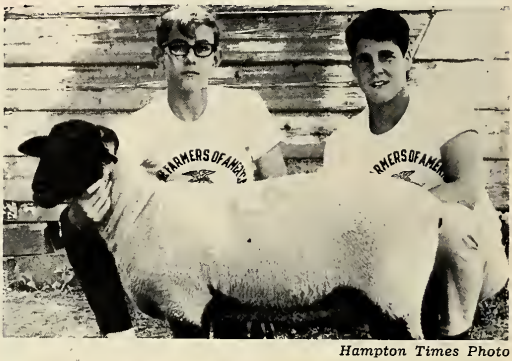


Pacific Region Vice President Richard Morrison, Gilbert, Arizona, enjoys chatting with three Oklahoma FHA presidents before speaking before 1,500 Future Homemakers attending their national Future Homemakers meeting in Los Angeles.

Steve Imerman and Charles Brown, both Hampton, Iowa, Future Farmers with a production tested ram they purchased.

Wausau and Schofield, Wisconsin, Future Farmers make a farm boy inspection of a new Ford just off the assembly line at a St. Paul, Minnesota, Ford Motor Company plant.

Midland Cooperator Photo



Hampton Times Photo

Emanuel County Institute (Twin City, Georgia) president, Bennett Whitfield, presents a walnut lamp to President Swan. Swan spoke to 325 at the chapter's FFA banquet.

This Shelbyville, Illinois, judging team won five out of six state judging contests. Left to right: kneeling, Louie Dennel, Bill Morris; standing are David Compton, Buster Eversole, Dave Kensel, and FFA President Swan.

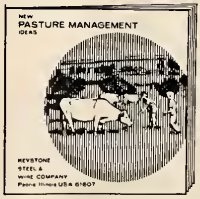
"Midriff bulge, honey?...It's easy on pasture"

"Lingering in the ladino sure beats that old dry-lot. Why with good pasture, two can live almost as cheaply as one. None of those high priced meals, like soybeans.

Come along, darling. Time to get your vitamins. It's always fresh and clean out here . . . and we can get away from the crowd. Never mind that bulge, honey. The old man likes you that way.

Know what gave him the idea of improving this pasture for us, the RED BRAND® way? Money, my dear, money! He's growing $4 where $1 grew before. Saves on the feed bill, besides giving us good clean living.

You've got to admit it, we're rolling in clover now . . . and the pasture's always greener on *this* side now."



Want to know how "the old man" is making more money without adding more acres? The secret's contained in a new booklet, "*New Pasture Management Ideas*." It's full of tips on how to turn a profit on idle acres and neglected acres with Galvannealed® RED BRAND fence. Suggestions for hogs, beef and dairy cattle and sheep. Send for your free copy today. Address: Keystone Steel & Wire Company, Peoria, Illinois 61607.

Breaking the entry barrier

BLUEPRINT for the FUTURE

By Len Richardson

LET'S SUPPOSE you've boomed across the entry barrier into a farm partnership with your dad. If you have worked out the management details outlined in your August-September issue ("3 Questions to Ask Your Father"), is there any possibility you might still roll unchecked onto some unmarked downgrade? With a farm partnership, this could mean only one thing . . . legal entanglement, the young farmers' graveyard!

You had best design a "Blueprint for the Future," because what you do now will influence your life for years to come, and determine how $30,000, $60,000, or even more of your property will be owned in your lifetime and then distributed at your death.

J. Edward Pawlick, assistant professor of Farm Management at Pennsylvania State University and a member of the Pennsylvania Bar Association, has marked out ways you can avoid legal problems.

Pick a lawyer in whom you can have confidence. You are choosing a man to whom you must bare your complete financial status and your dreams. While one man may be an excellent attorney for your neighbor, you may not have confidence in him for some reason. Even if it is a poor reason, he will not be effective if you don't have confidence in him.

When you pick your lawyer, go to his office and talk to him. This will help you decide if he is your man. Don't be afraid to ask what he is going to charge. While he can't give you an exact answer, he will be happy to give an approximate figure. Before you see the attorney, have an inventory of the value of cattle and machinery, and some idea of expected yearly profits.

If you expect a lawyer to do an adequate analysis of your situation, it will require at least a three- to four-hour interview with you, your vo-ag teacher, and your parents to discuss the aims and goals of the partnership. Try and persuade the lawyer to come to your farm where he will not be interrupted by the telephone and visitors. And you and your folks will be more relaxed and natural at home.

All details should be put into writing by your lawyer. If it is written, there can be little question of a misunderstanding, and you cannot forget the details. Also, after your fathers' death you may have to convince other heirs what your dad promised when the partnership was started. You will have it in writing with your father's signature.

Your father may want to price the farm or equipment at less than actual value, but if he does both parties should realize that a gift is being given and exactly how much. It will improve relationships and make tax matters easier.

You should not promise to keep your mother and father for the rest of their lives. It is best if your parents get their investment back and spend their money as they wish. If you should die after you are married, your wife should know exactly what her financial status is.

Liability. The sheriff could sell either partner's interest if he is unable to pay his debts. Therefore, neither partner should ever endorse a note for anyone. It would be best if liability insurance on each partner's personal car is $100,000 for each person injured, $300,000 for each accident, and $20,000 for property damage. The extra cost is very little and well worth the price. Liability insurance should also be carried on the farm and on all farm vehicles.

Taxes. Your attorney can best advise you on how to keep taxes low. The partnership will fill out a Form F the same as you now do and then transfer each partner's share of the profits to partnership Form 1065. The individual partners will then record individual incomes on their 1040 forms.

From a federal income tax view, it is best if your father sells half to you and then both of you contribute equal property assets to start the partnership.

If your father takes less than 30 percent of the purchase price the first year, he must pay capital gain tax only as he gets the payment each year. Thus, if he sells a property for $50,000, making a 50 percent or $25,000 profit and receives only $5,000 the first year, he pays tax only on the profit received which is $2,500 or 50 percent of the payment. By this method, capital gain is always cut in half so actual addition to his income that year would only be $1,250. Thus your dad keeps his tax burden from being large any one year.

Federal estate tax does not apply unless your estate, after all debts are paid, amounts to more than $60,000. Your lawyer can advise you, but in most cases they will not affect a partnership.

Chances are, the federal gift tax will not concern you. Here's why. A person can give away $30,000 once in his lifetime without paying any tax. In addition, he can give away $3,000 tax-free each year. Thus, your mother and father could jointly give away $60,000 tax-free one time and in addition give $6,000 each year to each of their children.

Your attorney will want to check state inheritance laws, but in most cases the tax will not be large enough to make a difference in your plans.

(Continued on Page 42)

At right: Breaking the entry barrier requires planning. Here David Poling, Dunkirk, Ohio, discusses plans with his FFA advisor, Mr. Robert McBride.
Photo by Ralph Woodin

FARMERS OF AMERICA

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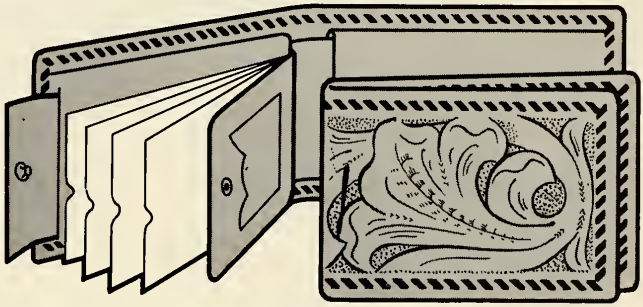

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Yes, send me your introductory Billfold Kit, 40-page Idea Manual and Valuable Certificates. I'm enclosing $1 as full payment. I understand I must be pleased or I get my $1 back. (Limit one per family.)

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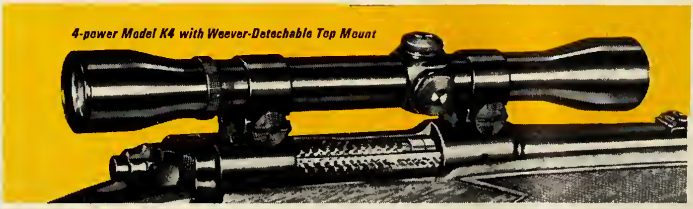

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Blueprint for the Future

(Continued from Page 40)

Social Security. Ask your attorney to check your Social Security plan. Your father will want his wages and Social Security taxes to be high before he reaches 65 because then his benefits will be high when he retires. After he reaches 65, his wages should be less than the maximum allowed so that his benefits are not lowered.

Interest is not counted by Social Security as wages. Therefore, your father should receive as little income as possible in the form of interest before 65, because it will not count. On the other hand, he can receive any amount of interest or payments on the farm after he starts receiving Social Security.

Rent is included in your earnings for determining Social Security credit only if you have "materially participated" in production or management. Thus, you would need to "materially participate" in the operation of a farm you rent before 65 so that rental income counts toward your base. If your father is 65, he would not want to "materially participate" because it would lower his Social Security benefits.

No "Blueprint for the Future" is complete without a will. Have your attorney review all old wills or write one for you.

Your "Blueprint for the Future" will probably include these items: (1) a partnership agreement which lists all details of the agreement, (2) a buy and sell agreement detailing what happens upon the death of a partner (3) a lease of the farm to the partnership, (4) any bill of sale necessary for sale of personal property, (5) any I.O.U. notes necessary, and (6) wills for all members of the family.

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Certified Horsepower makes Oliver owners "Power happy"

"...I've got more power than I expected—not less—in my Oliver tractor.

"With Oliver's Certified Horsepower every tractor has to deliver *at least* its official rating or it can't leave the Oliver factory. So you usually get more power than you expect—often much more. No certified Oliver tractor has ever been reported short of rated power in the field.

"That means I don't knock off a plow bottom from the number that my dealer and the catalogs suggest. Because it's certified, my new Oliver really handles the full number of bottoms I expect, spring or fall, anytime the ground is fit to plow.

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OLIVER

FOR MEN WHO GROW

Selecting The All-Purpose SHOTGUN

By Russell Tinsley

TO BE HONEST, there is no such thing as an all-purpose shotgun. In specialized situations, one shotgun obviously is better than another; that's why we have different gauges. But few of us can afford an arsenal of scatterguns to satisfy every need and whim. Therefore, looking for a compromise, we must make do with one shotgun, a weapon that will be adequate for a variety of hunting situations although maybe superior in just one or two.

If I were shopping for just one shotgun for my diverse hunting needs, I would, based on considerable experience, choose a 20-gauge gun with a 26-inch barrel fitted with some sort of choking device and chambered for three-inch magnum shells. The action of the gun—autoloading, pump, double-barrel, over-under—is a personal preference. However, the single-barrel repeaters, pump and autoloading, are priced within the average budget and are most popular.

Primary consideration is the gauge, which for me is the 20 gauge. This may come as a surprise to most readers of *The National FUTURE FARMER*. An all-purpose shotgun in most people's thinking is the time-honored 12 gauge. The 12 still is a good choice, but it is debatable whether its advantages really outweigh its disadvantages.

The 12 gauge outsells the 20 by better than two to one. This doesn't necessarily mean the 12 gauge is better, however; tradition greatly influences sales. As to advantages, 12-gauge ammunition is readily available in more different places; there is more shot in comparable shells; the 12 gauge throws a better pattern with the same amount of shot (theoretically, although it depends on the gun) since the shot column is shorter which results in less friction; it patterns buckshot better and throws a bigger slug for deer hunting; and it will reach slightly farther with more power.

Yet the 12 gauge has more recoil (kick), more noise, shells are bulkier, and the typical gun is heavier and less trim. Except for shooting waterfowl like ducks and geese at extreme ranges and for deer hunting, a 20 will do everything the 12 will do and, in many instances, do it better.

Rapidly gaining in popularity, the 20 gauge demand can be attributed to more powerful shotshells. Magnum shells in 2¾-inch length (not all guns will take the three-inch magnum) make a 20 gauge comparable in performance with high-velocity loads in the 12 gauge. The 16 gauge is sort of a hybrid of the 12 and 20; it can't compete with the 20 in upland game shooting nor with the 12 for long-distance shooting of ducks and geese. Popularity of the 16 gauge is going down, down! Difficulty in obtaining 16-gauge shells in some places and dubious resale value of the weapon makes the 16 gauge a poor choice.

While the 12 gauge will outperform the 20 in some situations, all-around use in the field is what you are looking for. To buy a 12 gauge because you might want to go goose hunting sometime is like a farmer, able to afford just one vehicle, purchasing a luxury automobile for his annual week-long vacation. Thus he struggles for 51 weeks to accomplish his farm chores with this auto just so he can travel comfortably for one week. If you do considerable goose hunting, a 12 gauge might be your best choice. But should you prefer all types of different shotgun hunting, pick a 20 gauge.

The 20 gauge will equal or outperform the 12 on upland birds like pheasant, quail, and doves. Because of lighter weight and trimmer design, it is faster handled. It is good for close-decoying ducks and small game animals like cottontail rabbits and squirrels. And for the hunter who realizes its limitations, it is adequate for geese. A friend consistently outshoots me on geese simply by picking shots within range of his weapon. He avoids cripples by ignoring high-flying geese that are in marginal range even for a 12 gauge loaded with magnum shells. When the 12 has powerful magnum loads, punishment is about as rough at one end as it is the other.

Shotgun gauge is only part of the story. Equally important is the choke which is constriction built into the barrel to control the shot blasted from the shell.

There are, basically, three standard chokes: improved cylinder, modified, and full. With improved cylinder, the shot spreads out immediately after leav-

(Continued on Page 46)

Miser.

Not your ordinary, mean, run-of-the-mill tightwad. This nickel-snatcher likes to *give* more than he gets. This one's the AC Spark Plug. Tractor-tailored to perform for you...whatever the job.

Everyone calls him by his initials, "AC," but "Economy" is his family name. He'll work for you from sun to sun...give power at peak-high every hour, every day. He literally sparks with efficiency. He saves you money, using gas sparingly and effectively.

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Selecting The All-Purpose SHOTGUN

(Continued from Page 44)

ing the muzzle for a liberal pattern at close ranges. Full choke holds the shot together, resulting in more pellets in a tighter pattern at longer ranges. Ideally, the shot should be evenly distributed within a 30-inch circle at the prescribed optimum-performance range. Consequently, any bird caught in this 30-inch spread, even on the fringe, should be a dead bird. An improved cylinder chokes gives the best pattern out to about 30 yards; the modified from 30 to 40 yards; and full choke for 40 yards and beyond. Yet the modified is adequate from about 20 yards to 50 yards, although it may be a bit dense from 20 to 30 and a mite thin from 40 to 50. So if only one choke would go on the all-purpose shotgun, it should be the compromise modified.

But a choking device, which can be added to the end of the barrel, gives a choice of all three chokes simply by adjusting the mechanism. Such a device curtails the gun's performance somewhat, but not enough to be of consequence under most field conditions.

Despite all this, the gun is just a mechanical contraption for firing and controlling shot. The right shotshell is as important to performance as the weapon itself. Field or low-base loads are best for thin-skinned birds like quail, doves, and pheasants; express or high-base loads are better for decoying ducks and small game animals; while magnum loads are correct for pass-shooting ducks, geese, and turkeys. (The term low or high base applies to the length of the brass at the base or primer end of the shell.)

Size of shot varies for different game. As late as 1916, the different ammo manufacturers offered a combined total of 14,383 loads. Today this number has been reduced to about 145. Thus the loads available today are the result of a century of hunting experience.

As you become more experienced in hunting, you'll determine which shot performs best for your specific hunting. But as a thumbnail guide, here are recommended loads and shots for different game: ducks: express loads, No. 4 or 6 shot, full choke for pass shooting and modified choke over decoys; geese: express or magnum loads, No. 2 or 4 shot, full choke; quail, doves, and pheasants: field loads, No. 6 or 7½ shot, improved cylinder or modified choke; squirrels and rabbits: express loads, No. 6 shot, modified choke; wild turkey: magnum loads, No. 4 shot, full choke; and varmints like raccoons and foxes: magnum or express loads, No. 2 shot, full choke.

Maximum range for any shotgun is about 50 to 55 yards. Anything beyond this is pushing things to the limit. Contrary to popular belief, magnum loads will not greatly out-range standard express loads. A magnum simply delivers more wallop and shot penetration at comparable distances. The heavier the shot, the more velocity and knockdown power it retains at greater range. But actually, long-shooting shotguns are seldom needed. The hunter who fires within a range of 40 yards can get by splendidly with the 20-gauge gun. He'll also find this sleek, lightweight, moderate-recoiling weapon much more pleasant to carry, swing, and shoot. That's why I am convinced it is the best all-purpose shotgun available today.

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Are you planning for the future? If so, consider this fact:

"Angus heifers are a good, sound investment."

Why?

One reason is—quality Angus steers bring an extra dollar or two when sold, netting more profit opportunity for you.

Just check the feeder auctions. And look at fat steer sales. You'll see Angus top the market about 80% of the time.

The packer pays more for Angus because they cut out a superior carcass and more saleable beef for him. For Angus usually have *less wasteful bone, belly and brisket.*

Less calving trouble—less work

What's more, with Angus you'll have less calving trouble. Heifers have bred-in hardiness, and Angus calves have smaller, polled-shaped heads that help make calving easier.

Angus cows nourish their young under adverse conditions too, for they are not bothered with snow-burned or sunburned udders. Angus do not have cancer eye and have natural resistance to pinkeye.

Angus are also naturally hornless so you have no troublesome dehorning problem. And Angus calves are not set back by unnecessary dehorning.

What's all this mean to you? *Less worry and much less work.* And at today's labor prices you'd be money ahead with Angus.

Build for your future

Remember, you don't just buy an Angus heifer—you invest in her earning power. And the earning power of Angus will increase—for naturally hornless Angus will be more and more in demand in years to come.

What's more, you'll produce sound, sturdy calves with less wasteful bone, belly and brisket—calves that will bring you more money.

Yes, Angus heifers are a good, sound investment. Why don't you start your Angus herd this year?

• AMERICAN ANGUS ASSOCIATION, ST. JOSEPH, MO.

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FARMING with a Fine Point

(Continued from Page 22)

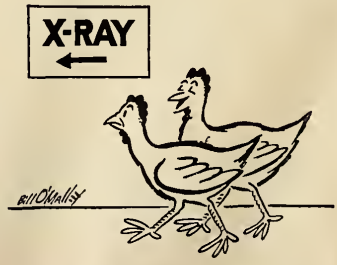
The Rainey team did almost all the work on the two modern feedlots, each of which will hold about 100 cattle. They paved the surface of each with concrete. A large, roofed bedding area adjoins each feedlot. Roofing also extends out over each side of the silage troughs. All it takes is a flick of the switch to start the auger moving the silage from the silos into the feed troughs. Both silos are unloaded automatically.

Like their father, both young Raineys were active in FFA. Jim earned his State Farmer Degree, and Mo was president of the degree team this year which won the federation and area contests and placed second in the state contest. It so happens that this was the same spot in the state contest that the Dinwiddie team earned the year Jim was president.

Mr. Rainey was active in the FFA at what was then Carson High School. Responsible positions in the community indicate that Rainey has put his FFA leadership training into practice. He is a past president of the Dinwiddie County Farm Bureau. Currently, he's chairman of the Piedmont Soil and Water Conservation district and a director of the local co-op. A former member of the county agricultural stabilization committee, he's presently a member of the ASC community committee. He's also chairman of the board of supervisors.

"You know they use to emphasize how important diversified farming was. But times have changed," observed Mr. Rainey. "The single enterprise seems to be the most profitable operation as a result of the technological revolution in agriculture."

One also gets the feeling that the Raineys are at the forefront of a new managerial revolution which is sweeping agriculture.



"It's the only way to candle eggs, my dear."

HONORING EXCELLENCE

SUCCESS IS won through hard work—not just talk and planning. So it was that this Star Farmer of America in the painting above progressed to the top of the ladder. The award is the culmination of labor and toil in all phases of agriculture.

No doubt, his parents and vocational agriculture teacher urged this Star Farmer to set down goals and ideals early in his agricultural career. Because he has done more than merely make this list, he has reached the top.

Every Future Farmer is taught basic skills ranging from farm mechanics and bookkeeping to growing livestock and crops. He must apply what he is taught in the classroom to his own agricultural career. Traits of responsibility, loyalty, patriotism, and leadership are all an important part of FFA activities. An application of the basic skills derived from vocational agriculture and FFA stimulates action and surely breeds a sense of obligation to follow through on goals and ideals.

Indeed, to be eligible to receive the coveted Star Farmer of America award, there has been application and plenty of hard work on the part of this Future Farmer. The nearly half-million Future Farmers of America are continually at work to improve, to accomplish their purposes, and to succeed.

Then, honoring excellence, one member is presented this award each year at the National FFA Convention in Kansas City. But only one! The others are still at work.

"Honoring Excellence" was produced from an original oil painting by artist Arthur Sarnoff. Mr. Sarnoff was especially commissioned by the FFA to paint this familiar scene from the National FFA Convention. It will be the central picture for the 1968 Official FFA Calendar.

To many of you, the picture will bring back memories of a terrific week full of excitement and plenty of activity in Kansas City; to some, the first trip out of state. To others, the Star Farmer of America ceremony was just the spark that inspired you to work harder. And to still other Future Farmers, it is an example of what to expect this year at the convention.

The FFA Calendar itself is like that. All year long, it reminds people about the FFA. The color pictures are not fancy posed scenes of what Future Farmers might do. Instead, they are true-life photographs of FFA members all across America—in action—on their farm or ranch, at school, in judging contests, at camp, and at work.

Your chapter can easily participate in the calendar program and have them distributed in your community.

Basically, there are three ways to participate; and there are three styles of calendars to choose. The styles will fill most needs—a desk style for individual use, a large poster style for business firms and other large places, and the home and office style to use in smaller offices, the home, or farm.

The first plan of participation (Plan A) is for chapters who want to get a local business firm sponsor. It also earns a sales' commission for the chapter treasury.

The second (Plan B) is for chapters who decide to buy and distribute calendars in appreciation to all the businessmen, farmers, and friends who support the chapter's program. It is also available for chapters who cannot make sales.

The third (Plan C) is for smaller quantities or even single calendars which a member can order. They have a general FFA message with no reference to a specific chapter.

Every chapter in the nation is eligible to participate. If your chapter wants more information, a Calendar Kit with complete details, samples, and order forms is available on request. In fact, your advisor may already have this Kit.

Chapters should consider the calendar program as a public relations (or fund-raising) activity. But, 1968 will be here soon. Orders should be mailed right away so they can be shipped to you to distribute before January, 1968. The Official FFA Calendar is published by *The National FUTURE FARMER*, Community Branch, Alexandria, Virginia 22306.

Mail your order or request for details right away.

A Hand Extended

Mr. M. G. O'Neil reported that donors had contributed over $200,000 in 1967.

Sam Mizer, second from right, leads a panel discussion on job opportunities.

Part of the large crowd of supporters who attended the annual donor meeting.

EVERYDAY more and more leaders of business and industry are realizing the significance of agriculture in America's future.

Thus, the donors to the Future Farmers of America Foundation, Inc. show their concern and interest in America's future through the FFA.

This hand extended is providing incentive awards to encourage Future Farmers to work, learn, and accomplish more.

In July, these donors to the FFA Foundation met in Washington, D.C. Mr. M. G. O'Neil, president of General Tire and Rubber Company, called the meeting to order as chairman of the Sponsoring Committee.

The Sponsoring Committee reported contributions to date amounting to more than $200,000. Mr. O'Neil believes the goal of one-quarter million dollars will be reached before year's end.

The Fort Defiance, Virginia, FFA Chapter conducted their July monthly meeting as a part of the program. They discussed items of business, such as final plans for a chapter outing and Foundation awards for members. Richard Engelbrecht, 1966 Star Farmer of America, was guest speaker at the chapter meeting. Sam Mizer, past national public speaking winner, lead a panel discussion on careers in agriculture.

Also in July, the Board of Trustees met with national FFA officers. The Board announced three new agricultural proficiency awards for FFA members. Starting in 1968, recognition will be provided in the areas of agribusiness, placement in agricultural production, and natural resources development.

In the area of off-farm agricultural occupations, an agribusiness award will be offered for those members whose experience-training programs are through work in providing services and supplies for farming operations or in processing and marketing farm products.

Placement in agricultural production awards will recognize achievement in gaining skills and experience from work on a farm or in some other production phase of agriculture such as greenhouse or nursery work.

Natural resources development includes the conservation and improvement of agricultural resources for recreation and other similar purposes. FFA members will be awarded for their personal efforts in beautification, total environmental development, and multiple use of forests, water, and wildlife for private and public use.

Mr. John C. Foltz, FFA Foundation coordinator, reported on plans and expansion of the program for 1968 at the donors' meeting.

National FFA officers were also on hand to express appreciation from their fellow FFA members to these donors —the men who see the future of American agriculture in the FFA.

Keynote address for the noon luncheon was given by D. N. McDowell, director of agriculture for state of Wisconsin.

Members of the Fort Defiance, Virginia, Chapter conducted their regular July chapter meeting as a demonstration for donor representatives at the meeting.

AGRICULTURE and YOUR CAREER

Agriculture in the future offers unbounded opportunities to the man who has prepared himself to meet its challenges.

The revolution in techniques and practices we've seen in the past few years shows no sign of lessening. Even now, scientists and specialists in our nation's Land Grant Colleges are testing new concepts and ideas which will give a new shape to farming in the future. And the influence of agriculture is spreading more and more into other areas of commerce and industry.

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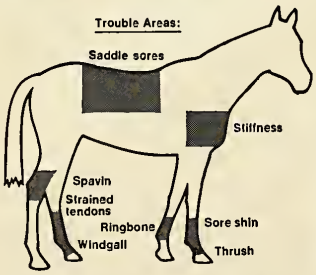

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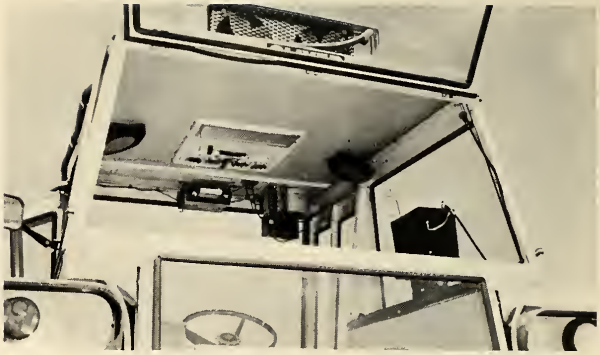

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Breakthrough for Hog Producers

RESEARCH OF the past decade has made commercial swine artificial insemination a reality. At the start, farmers questioned the feasibility of swine artificial insemination. Were conception rates as good and litters as big as in natural breeding? Research gave the answer. In one of the first comparisons, conception rates were 58 percent with natural service and 62 to 75 percent with artificial insemination. Statistically, there was no significant difference between the two methods.

One of the first trials of artificial insemination for hogs under field conditions was in 1959 by Badger Breeders Cooperative, Shawano, Wisconsin. The cooperative used over 300 sows in the study. The conception rates were 49 percent for sows and 37 percent for gilts based on first service, and litters averaged 10 pigs from sows and 8.7 from gilts. A field trial on about 250 sows three years later by Tri-State Breeders had about the same conception rate on first service.

Researchers knew that a commercial program of artificial insemination could not move forward very fast until first service conception rates approached those of cattle—that is, 68 to 70 percent. So they took care of as many details as possible to make the rates better.

There was better mixing of the semen extender, and it was packaged in individual ampules. Technicians were better trained and learned better timing. This combination of management details brought farrowing rates at first service up to 67-70 percent, a figure that would be acceptable to hog farmers.

The commercial tests were expanded to more herds with continued success. In 1964-65, 2,764 inseminations were sold. In 1965-66, over 5,000 sows and gilts were inseminated. Farrowing rates were 76 percent for sows and 72 percent for gilts, and average litter size was 9.4 pigs from sows and 8.4 from gilts.

The potential for commercial swine artificial insemination is almost unlimited. It has been estimated that 50 percent of the sows farrowed in the U.S. are within a 150-mile radius of a boar stud.

The potential for commercial swine artificial insemination is unlimited.

Will hog men accept artificial insemination in the years ahead? They will, based on what hog farmers now say about it. More than nine out of ten farmers, whether users or non-users, had heard about artificial insemination. The major reason farmers gave for using swine artificial insemination was to improve quality and market value of their pigs. Farmers who used artificial insemination learned of it and were convinced mainly through neighbors and vo-ag adult farmer classes.

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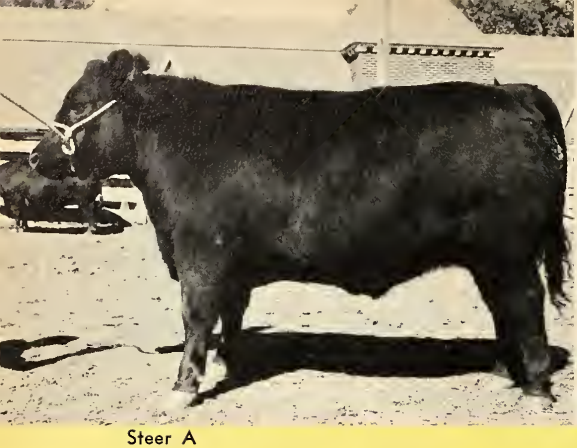
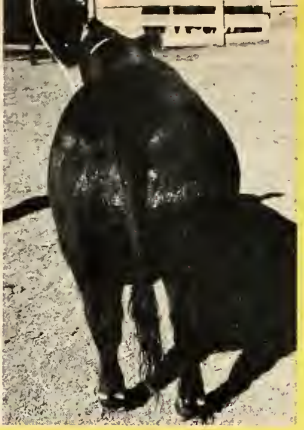


Steer A



Steer B

A NEW Look At

IT HAS BEEN SAID that FFA actually developed from vocational agriculture livestock judging contests. It is doubtful that there would have been an FFA if students hadn't started gathering for these competitive events. But judging, like the FFA, is changing. FFA must adjust to an agriculture that is more than farming, and the cattle judge needs X-ray glasses so he can make a decision based on carcass traits as well as type.

Professor Harlan Ritchie of Michigan State University told a meat conference recently, "If a judging team were to base their decision on five-year-old standards, they would not fare very well in today's contests." At the same meeting, R. W. Bray, a University of Wisconsin meat specialist, got to the heart of the problem: "How do you make a judgment based on carcass traits the consumer wants and not overlook important production and type traits?"

Clearly it is a question that FFA judging teams and cattle producers must answer. A step in the right direction was taken recently by E. A. Kline and Robert Taylor, two Iowa State animal scientists. They started with the two live steers you see on this page. Which one would you pick . . . steer A or steer B? Now that you have made a visual judgment you are going to have a chance to see beef cuts from these animals as they actually appeared beneath the hide of the steers . . . undistorted by hanging and stretching from the rail of a meat processing plant.

This was made possible for the first time because the scientists froze the carcasses in a standing, upright position. The next step was to cross-section the frozen carcasses at six important places. Note the dark strips on the photos of the two carcasses indicating where the cross sections were made.

"It was like putting on X-ray glasses and seeing what was underneath the hide," Kline pointed out.

"Many of the things we've been talking about in type are not too realistic. With the perspective gained by looking at the undistorted carcass, we should be able to improve a great deal the visual appraisal of the live animal," the two animal scientists agree.

Kline points out that the most meaty steers among those cross-sectioned had a "round" rather than a blocky appearance. They were, in a word, muscular.

Depth of body may turn out to be an overrated type characteristic. Depth is achieved at the flank, chiefly by filling out with large deposits of fat. However, when a beef carcass is hung on the cooler rail, this deposit is "slimmed down" by the stretching of the warm carcass as it hangs.

This all leads up to the fact that if you picked steer B over steer A, you have made a mistake. By many of the older type judging concepts, however, it is a common mistake. Here is what the experts said about these two steers. First consider the side and rear views of the live steers.

From the side, steer A is longer bodied and more upstanding than steer B but does not have as deep a body. Steer A is longer in his rump and has a greater proportion of his weight in his round and loin. Steer B shows excessive finish in the throat, dewlap, brisket, and flank.

From the rear view, steer A is more evenly turned over his top, while steer B is rather flat-topped showing evidence of shelf fat along the loin and rib. Steer A demonstrates more thickness through the middle part of the quarter. The widest part of steer B is through the middle of his back. His width tapers from this point through his rump which is evidence that the steer is over-finished.

Steer A

Steer B

Judging

Now look at the first photo showing the side view of the skinned frozen carcasses. The side view of steer A emphasizes the trimness of underline, plate, flank, and brisket, and also shows a more round shape to the rear quarter. The carcass pictures show the differences in type, length, depth, and shape, as was evidenced in the live pictures.

The second picture shows A and B sectioned through the round. This cross section of A shows the heavily developed muscular area which was indicated in the side and rear views. Note the smooth rounded appearance over the top of the rump and the very smooth even turndown over side of the round. The fat covering over the top of the rump is minimal, and the muscles have a fairly level appearance at the top. There is only a thin fat cover over the outside of the round. In B the round is lacking thickness throughout. Note the difference in thickness of the comparable muscles in each section. In B we see a more "V" shaped appearance through this section as compared to a more nearly round appearance in A.

In the next photo, you see a section between the twelfth and thirteenth rib. This section was made at the same place as the dressed beef is normally quartered by meat packers. The loin eye in A measured 13.5 square inches and is covered by 0.75 inches of fat. The loin eye of B measured 10.6 square inches with 1.5 inches of outside fat. Steer A shows a good spring of rib and an overall round appearance, while steer B has a more flat rib and is more nearly oval in shape. Both of the carcasses graded prime.

A section at the point of shoulder is shown in the next to last photo. This view portrays the heavily muscled appearance, and especially shows a fairly trim brisket with a good shoulder development. The general round appearance continues in all sections of steer A. In B there is more brisket fat and more seam fat throughout this section.

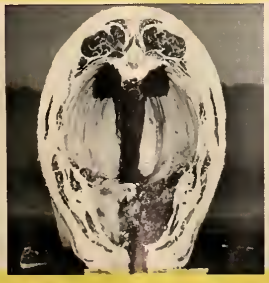
The final photo shows the fat trimmed from the bulge of the round. Only 4¾ pounds of fat were trimmed off this section of A, while 10¼ pounds of fat trimmed from B. Note the full thick muscling of the round of steer A as compared to steer B after the fat has been removed. When the entire carcasses were separated into lean, bone, and fat, steer A had 60 percent lean, 14 percent bone, and 26 percent fat. Steer B had 43 percent lean, 13 percent bone, and 44 percent fat.

Round

Rib Section

Shoulder

Fat Comparison



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Sportrait

By Stan Allen

THE CHICAGO WHITE Sox won a 4-2 game from the Cleveland Indians on April 30 with Hoyt Wilhelm winning in relief. It was his one-hundredth relief win, and he is the first pitcher to achieve this feat. Most amazing is Hoyt's age. He is 44 years old, hurling his seventeenth year of major league ball after toiling eight years in the minor leagues.

Wilhelm's long career and success is due mainly to one pitch, which he uses most of the time, a knuckle ball. He began to develop the pitch as a youngster on his dad's farm in Huntersville, North Carolina. He used it to earn good records at Cornelius High School and in sandlot ball. His first pro ball was with Mooresville of the North Carolina State League in 1942 where he won ten games with three losses. After interrupting his career for three years of military service, Hoyt returned to Mooresville to become a big winner in 1946 and 1947. He was drafted by Jacksonville, a New York Giant farm team, in 1947 and worked his way up to their top farm club, Minneapolis in the American Association. An 11-win, 14-loss record in 1951, with 148 strikeouts plus a 3.94 ERA, won him a call to New York in 1952.

He was a full-time reliever in 1952, pitching a league high 71 games and fanning 108 hitters to win 15 games against 3 losses. This led the league as did his 2.43 ERA. After slumping a bit in 1953, he came back strong for the Giants in the '54 world championship. He retired seven straight hitters in the third and fourth World Series games to save both games. Hoyt began to appear in fewer games in the '55 and '56 seasons, as his knuckler was fooling the catchers as often as the batters.

He was traded to St. Louis in 1957 but pitched only 55 innings that season. He was sold to the Cleveland Indians later in the year where he didn't fare much better as their catchers couldn't hold his knuckler either. He throws it sidearm, or three-quarters, with his fingers partially bent and placing the index and middle fingertips on top of the ball with his nails digging into the covering. This causes the ball to float with very little spin and change direction on its downward course just before it reaches the plate. It may break up or down, or from side to side—no one knows. Hoyt does throw a sinker, a slider, and a curve but mostly uses the knuckler.

Cleveland sold Hoyt to Baltimore in August of 1958 where he started four games and worked five in relief. He won one game, and it was a game pitchers dream about, a no-hitter against the New York Yankees. He allowed only two Yankees to reach base, on walks, fanned eight, and won the game 1-0 on a Triandos' homer. Baltimore manager Paul Richards had a new catcher's mitt designed that was almost twice as big as a regular mitt. With this mitt, catchers could hold Wilhelm's pitches, and he had a fine season in 1959. His 2.19 ERA led the American League and made him the first pitcher to ever lead in ERA percentage in both leagues in different years.

Pitching mostly in relief since 1960, Hoyt seems to improve with age. Traded to the Chicago White Sox in 1963, Wilhelm continues to baffle hitters with his knuckler. Chicago was leading the American League going into the last third of this season, and Hoyt's pitching has played a big role. He has worked 63 innings in 34 games, with 7 wins against 3 losses and a fine ERA of 1.14.

At the end of the '66 season, he held the major league record for most appearances in relief —766; most innings pitched in relief—1,428; most wins in relief—99; most games finished in a career—485; and he also holds the record for most consecutive errorless games by a pitcher—299.

He hasn't made an error since May 16, 1963. His lifetime 2.53 ERA is the lowest around today, and his records grow every time he walks in from the bull pen.

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41—Good Grooming Guide For Busy Guys—Good grooming takes time and that's probably one thing you don't have too much of. This "Good Grooming Guide" will help you make the most of the time you have and help you to organize yourself so that your personal care will eventually become automatic and effortless. (Winthrop Laboratories)

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43—Farm and Ranch Building Evaluation Fact Book—This full-color booklet thoroughly discusses the science of farm buildings in three well-illustrated segments dealing with planning; construction details; costs, and financing. The 40-page report was produced under the technical guidance of Dr. Merle E. Esmay, Michigan State University. (Aluminum Company of America)

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FFA IN

NEBRASKA—Officers of the Superior Chapter decided they needed to improve their letter writing ability.

The chapter made a special report of the project at the state FFA convention to share the idea.

The chapter president wrote letters to the president of three other chapters. (Sentinels wrote sentinels, etc.) In total, 18 chapters received letters from Superior.

Content of the letters was generally about chapter activities and exchanging any good ideas. The informal type letters made a special request that the letter be answered.

Officers are the first to admit to the success of this letter exchange. Better letter writing requires some thought about the organization and construction of a letter, especially, so the writer and reader understand each other.

GEORGIA—Vocational agriculture departments in five Georgia high schools have set up a "sister school" relationship with five agricultural schools in Kagoshima, Japan.

This program began this year when Glenn Segars, Georgia Department of Agriculture, and a group of Georgians on a "People-To-People" tour visited Kagoshima. Governor Salvero Kanemaru of Kagoshima expressed a desire for this "sister" program because Georgia's climatic and agricultural conditions are so similar to those in Kagoshima.

The five Georgia schools are Tift County, Patterson, Effingham County, Berrien County, and Winder-Barrow.

Georgia FFA'er, Wade Griner, talks to Kagoshima exchangee, Hidenori Shirai.

These Rhode Island members used some sidewalk promotion to announce a show.

Students from these schools will correspond and exchange pictures, slides, and materials concerning the FFA in Georgia and Japan's agricultural youth clubs.

Plans are being made for exchange visits next year. One student from Kanoya Agricultural High School, Hidenori Shirai, recently visited Georgia. He was in a group of 15 students and four adults touring Georgia. In addition to a visit to the state capitol and Department of Education, Shirai spent a day and night in Patterson visiting with FFA members.

RHODE ISLAND—Why not try a spring flower show and plant sale? Coventry Chapter did and had unbelievable results.

What started out as a small project mushroomed into a project involving industrial art students, art and music students, adult classes, and garden clubs along with the FFA. Originally, a member of the horticulture advisory committee proposed that the Future Farmers sponsor the event.

Special features included a Roman garden set up by members of the Latin classes, student demonstrations of plant propagation, student floral arrangements, talks on insect and disease control, musical program by members of the music classes, soil testing service, and colored movies about landscaping and lawns.

The chapter took in $388.47, but they consider the real benefits to be:

The opportunity to learn by doing. They ordered the seeds and plants, started and cared for them, and sold the finished product.

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The opportunity to work together with fellow students, teachers, parents, and other people in the community.

Firsthand experience in salesmanship and merchandising.

Valuable experience in meeting the public and keeping accurate records.

ANOTHER HONOR has been presented to FFA's 1966 Star Farmer of America.

Richard owns and operates a 252-acre dairy farm near Madison, New York. He has a herd of 39 producing dairy cows, with 20 heifers and calves coming on as replacements. Included in the herd are registered Holsteins and Ayrshires.

Richard Engelbrecht has been selected as recipient of the American Academy of Achievement Golden Plate Award. The award goes to "representatives of the many who excel" in the great walks of life.

Indeed Richard was among great men. To name a few:

Commander M. Scott Carpenter, U.S. Navy—for astronautical and ocean exploration.

Robert W. Hellwarth, Ph.D.—for exploration and invention of the "giant pulse" laser light.

David Lawrence, founder and editor of *U.S. News & World Report*— for distinguished journalism.

Lt. Walter J. Marm, U.S. Army —for extraordinary heroism in Vietnam.

Richard reports, "The most outstanding feature of the affair was the opportunity to meet and talk with so many outstanding and unique people. The object of the American Academy of Achievement is to inspire youth." (There were 300 honor students invited to the awards presentation.)

In addition to their trip to Dallas, Texas, the Engelbrechts visited with Buddy and Josie Smith in Booneville, Mississippi, 1966 Southern Region Star Farmer. Then in California Richard appeared on "Agriculture USA" TV show and toured several dairy farms (courtesy of Bank of America).

MAINE—The five state officers of the Maine Association attended a workshop with state officers from the New England area at West Greenwich, Rhode Island.

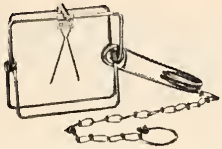
Clarence Whitaker, Mars Hill chapter advisor, accompanied the group which included Wayne Smith of Caribou, Maine, state president; Frederick Edgecomb of Limestone, vice president for the northern district; Michael I. Umphrey of Washburn, secretary; James Alexander of Bridgewater, reporter; and Conrad L. Edgecomb of Limestone, sentinel.

The Maine officers participated in all sessions of the workshop which revolved around the theme of public relations.

At the opening ceremonies for the first session, Alexander served as reporter, and at the Vesper services Umphrey presented a talk on character and brotherhood. Maine's state president led the opening and closing hymns at the Vesper service.

In other group sessions, Frederick Edgecomb spoke on introductions for awards presentations; Alexander spoke on newspaper editing; Conrad L. Edgecomb participated with others in a radio skit; Smith spoke on developing better relations; and Whitaker served as chairman of the evaluation committee.

Richard Engelbrecht gets a closer look at dairying in southern California.



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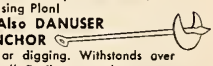

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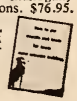

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Bud: *"Did it work well?"*
Sam: *"She was gorgeous for three days—then the mud fell off."*

Ritchie Lester
Rockdale, Texas

Did you hear about the man with the Gleam in his eye? Someone bumped him while he was brushing his teeth.

Carl Loyd
Baldwin, Florida

Tom: *"Have you heard about the chug-chug girls yet?"*
Jack: *"No, I haven't."*
Tom: *"They're go-go girls over 40."*

Billie Wilkin
Mount Erie, Illinois

"Greg asked me for a date today—during history test."

Sam: *"What has four wheels and flies?"*
Wayne: *"I don't know."*
Sam: *"A garbage truck!"*

Sam Blackwell
Monticello, Georgia

"I can't bring my report card back," the boy said to his teacher. *"You gave me an 'A' in something, and my parents are still mailing it around to all the relatives."*

Wayne Seider
Appleton City, Missouri

Bruce: *"Say, that's a pretty funny joke. Why don't you send it to The National FUTURE FARMER?"*
Dan: *"I can't."*
Bruce: *"Why not?"*
Dan: *"That's where I got it."*

Don Frantz
Eglon, West Virginia

Proud teenager: *"Would you ever have thought this car was one I bought secondhand?"*
His pal: *"Never in my life. I thought you made it yourself."*

John Miller
Pleasant Hope, Missouri

Bill: *"How would you compare a steer's head and a speech?"*
Peter: *"I don't know."*
Bill: *"They both have a point here, a point there, and a lot of bull in between."*

Keith Landin
Warroad, Minnesota

City man standing in farmer's pasture: *"Is that bull safe?"*
Farmer: *"Well, he's a darn sight safer than you are."*

Gary Day
Monticello, Maine

A lot of colleges are adopting a new marking system: A, B, C, D, and Vietnam.

Eddie Smith
Black, Alabama

Mother: *"Did you thank Mrs. Porter for the lovely party?"*
Small daughter: *"No, I didn't. The girl ahead of me thanked her, and Mrs. Porter said, 'Don't mention it,' so I didn't."*

Lavelle Griffin
Collins, Georgia

Zeke has never had a car accident except one head-on crash. It wasn't his fault. It was the sign on the highway which said, *"Do not cross the line if yellow."* He showed 'em he wasn't.

Mike Matheny
Cave City, Arkansas

Tom: *"Do you know what you would get if you crossed an octopus with a chicken?"*
Joe: *"No. What?"*
Tom: *"Enough drumsticks for everyone!"*

Larry McCombs
Urbana, Ohio

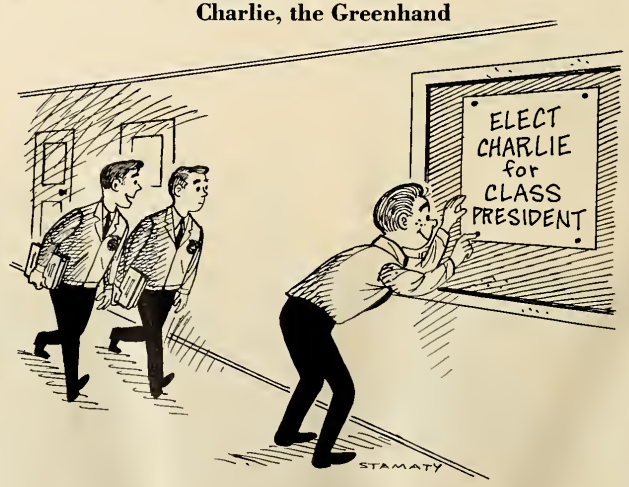
Dad, riding along in car: *"Look, there's a Jersey cow."*
Son: *"Wow! You must have great eyes to be able to see its license plate from here."*

James Lee
Rhome, Texas

Teacher: *"Billy, to what family does the whale belong?"*
Billy: *"I don't know, ma'am. No one in my neighborhood has one."*

Tom Harris
Fairmont, Minnesota

Charlie, the Greenhand



"The only pull Charlie has is with a tractor, and that won't pull votes."

The National FUTURE FARMER *will pay $1.00 for each joke published on this page. Jokes must be submitted on post cards addressed to The National* FUTURE FARMER, *Alexandria, Virginia 22306. In case of duplication, payment will be made for the first one received. Contributions cannot be acknowledged or returned.*

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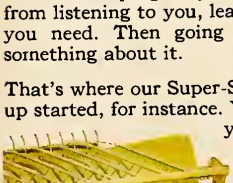

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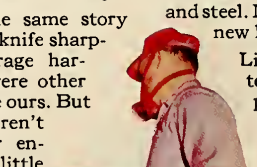

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